DOCUMENT RESUME

ED 331 193 EC 300 174

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TITLE An Evaluation of Special Education Student Outcomes and Program Quality Indicators. Final Study Report.
INSTITUTION Center for Resource Management, Hampton, NH.; Colorado State Dept. of Education, Denver.
SPONS AGENCY Office of Special Education and Rehabilitative Services (ED), Washington, DC.
PUB DATE Jun 90
NOTE 199p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC08 Plus Postage.
DESCRIPTORS Attendance; Behavior Disorders; *Disabilities; Educational Quality; Emotional Disturbances; Mental Retardation; *Outcomes of Education; *Program Evaluation; School Effectiveness; Secondary Education; Student Attitudes; Suspension
IDENTIFIERS *Colorado

ABSTRACT

The final report describes a Colorado project to evaluate the effectiveness of special education programming based on student outcomes and program quality indicators in 14 secondary schools. Major findings included: special education students, especially students with emotional/behavioral disabilities, had higher absence and out-of-school suspension rates than regular education students; 12th grade special education students were less likely than non-handicapped peers to graduate with a diploma; special education students whose grade performance was below satisfactory had higher absence rates and were more likely to have been suspended than other special education students; mentally retarded students reported being more satisfied with school than did students with emotional/behavioral disabilities; educators reported that indicators of quality were sometimes-to-almost-always found in their schools with few differences between regular and special educators; and schools whose staff reported higher ratings of program quality tended to have lower suspension and dropout rates. Eleven appendixes making up the bulk of the report include: a school and program overview; materials on student outcome data collection procedures; the student survey and interview forms; the staff survey form; comparison of surveyed and not surveyed special education students; grade performance data by type of handicapping condition; and grade performance and absence rates. (DB)

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AN EVALUATION OF SPECIAL EDUCATION

STUDENT OUTCOMES AND PROGRAM QUALITY INDICATORS

FINAL STUDY REPORT

BEST COPY AVAILABLE

Submitted to:

U. S. Department of Education
Office of Special Education and Rehabilitative Services

CFDA Number 84.159
State Agency/Federal Evaluation Studies Program

Submitted by:

Colorado State Department of Education
201 East Colfax Avenue
Denver, Colorado 80203

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AN EVALUATION OF SPECIAL EDUCATION

STUDENT OUTCOMES AND PROGRAM QUALITY INDICATORS

Final study report of the Colorado project on evaluation of the effectiveness of special education programming at the secondary level based on student outcome and program quality indicators

June, 1990

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EXECUTIVE SUMMARY

The Special Education Services Unit of the Colorado Department of Education (CDE) requested assistance under the State Agency/Federal Evaluation Studies Program administered by the Office of Special Education Programs, U.S. Department of Education, to conduct a study that would increase the state's capacity to examine the effectiveness of special education services delivered to handicapped students. The present study was an outgrowth of an emerging commitment in Colorado to evaluating the quality of special education programs; and the Special Education Quality Indicators Project reflects the state's commitment to program improvement. This commitment was enhanced by the financial support and technical assistance provided by the federal government through the Cooperative Agreement program.

Two major objectives of the study were:

1) To assess the impact of special education programming on student outcomes such as: attendance; suspension; dropping out; graduation; grade performance; satisfaction with school; perceptions of expectations and support special education students received from their teachers; special education students' perceptions of their pre-employment competencies and independent living skills; and level of school and community integration.

2) To assess the level of the Colorado Special Education Quality Indicators found in the pilot schools and to determine which program quality indicators have the strongest relationship to student outcomes.

The focus on a range of student outcomes, many of which are relevant to all students, regardless of their disability status, reflects the importance of measuring and monitoring behavioral, cognitive, psychological, and social dimensions of the school experience of handicapped students. The dual focus on student outcomes and program quality indicators reflects the recognition that one means of determining program effectiveness is to examine the interrelationship between these two areas.

The specific variables examined in this study have been defined in the Colorado Special Education Quality Indicators, an indicator system which provided the basis for linking the study's questions to the data collection methodology. This study provided the opportunity to obtain information on the utility and viability of the indicator system for building a database that could be useful both for research purposes as well as for ongoing monitoring of special education programs. This furthered a primary study objective, namely, to increase the capacity of both state and local educational agencies to systematically examine, assess, and improve special education programs and services on an ongoing basis.

This research project was not designed to produce statistical estimates of student outcomes or quality indicators for the entire state. Instead it utilized data collected from fourteen pilot schools to examine the levels and interrelationships of student and program variables. Although these schools participated voluntarily, they are typical of high schools in Colorado and reflected a variety of geographic regions, enrollment sizes, and urban, rural, and suburban settings. While the specific findings are most useful to the schools who participated, they will assist the CDE to develop a clearer understanding of the pertinent student outcomes and program indicators at the high school level, which can be monitored on an ongoing basis. Also, information was obtained on the kind of data that is difficult to collect or analyze; what

concepts are not measured consistently across schools; and problems that can be anticipated when accessing school records for both regular and special education students in future data collection efforts.

Some findings of interest are:

- Special education students had higher absence and out-of-school suspension rates than regular education students. In particular, students with emotional/behavioral disabilities averaged one absent day for every seven enrollment days. One-fourth of these students received an out-of-school suspension at least once during the 1988-89 academic year.

- Twelfth grade special education students were less likely than their non-handicapped counterparts to have graduated with a diploma. Half of the twelfth grade special education students with emotional/behavioral disabilities and half who were mentally retarded did not receive either a diploma or a completion certificate during the academic year 1988-89.

- Special education students whose grade performance was below satisfactory had higher absence rates and were more likely to have been suspended than those with above satisfactory grades.

- Students with higher absence rates and who had been suspended at least once reported lower levels of satisfaction with school, and less frequently experiencing positive expectations and support from their teachers.

- Mentally retarded students reported being more satisfied with school, and more frequently experiencing positive expectations and support from their teachers than did students with emotional/behavioral disabilities. However, they reported less frequent participation in community activities and less knowledge of independent living skills. Mentally retarded students received more satisfactory and above satisfactory grades than did students with either perceptual/communicative or emotional/behavioral disabilities.

- Special education and regular education staff reported that indicators of quality were sometimes to almost always found in their schools.

- In general, the differences between special education and regular education staff ratings of program quality indicators were small enough to suggest a fairly common view of the frequency with which the indicators were evident in their schools.

- There was some evidence that schools whose staff reported higher ratings of program quality tended to have lower suspension and dropout rates, and higher graduation rates than those whose staff had lower ratings.

1. INTRODUCTION

Purpose and Importance of the Study

The Special Education Services Unit of the Colorado Department of Education (CDE) requested assistance under the State Agency/Federal Evaluation Studies Program administered by the Office of Special Education Programs, U.S. Department of Education, to conduct a study that would further the development of state capacity to examine the effectiveness and impact of special education services to students with disabilities. This study was an outgrowth of Colorado's statewide Special Education Quality Indicators Project and reflects the state's commitment to special education program improvement. The study also reflects the federal emphasis on assisting states in their efforts to improve the delivery of special education programs and services.

Purposes of the Study

The major objectives of the study were:

1. To assess the impact of special education programming on specific student outcome indicators that include: attendance, suspension, drop-out, and graduation rates; grade performance across curricular areas; satisfaction with school; student perceptions of their job preparation, pre-employment competencies and independent living skills; and school and community integration.

2. To assess the level of the Colorado Special Education Quality Indicators found in the pilot schools and to determine those program quality indicators which appear to have the most positive relationship to student outcomes.

3. To increase the capability of local school districts to systematically assess and improve programs and services on an ongoing basis.

4. To increase the capability of the Colorado State Department of Education to provide technical assistance support to special education program evaluation and program improvement.

Both nationally and in Colorado, the study objectives represent timely and significant areas for exploration in current efforts to ensure the most effective education for students with disabilities in secondary school settings. They reflect the importance of giving focused and systematic attention to student outcome indicators as a way of determining program effectiveness for these students. They also reflect the necessity of developing local school district capacity to compile and utilize student outcome data as a measure of program effectiveness on an ongoing basis.

On a national level, the study objectives reflect major trends that have occurred over the past several years in both special and regular education, trends motivated by the push toward excellence in education, and a sharper focus on educational outcomes for students. These trends also reflect important technical assistance commitments of the CDE.

There are five features of the study that are particularly worth noting:

1. The study contributes to increased understanding of the pertinent student outcome indicators that merit ongoing systematic examination as associated with the effectiveness of special education programming at the high school level.

2. The study contributes to increased understanding of the relationships that exist among student outcome measures.

3. The study contributes to increased understanding of program quality indicators (practices and conditions) that are most related to student outcomes.

4. The study has an important developmental component in that tools (instrumentation, procedures, and analysis formats) were produced through the study for future ongoing use by Colorado school districts. In this sense, the study will advance current evaluation and technical assistance commitments of the CDE, and help to build long term capacity at the state and local level.

5. The study involves replication and adaptation of indicator-based evaluation methodology from the New Hampshire Department of Education. This type of sharing maximizes the use of resources and contributes to establishing and implementing consistent and compatible evaluation approaches across state agencies that are focusing on similar issues in the special education field.

In summary, through the study, the CDE will help Colorado educators and others develop a clearer understanding of pertinent student indicators at the high school level, the requirements of tracking such indicators on an ongoing basis, and specific program practices and conditions that have a relationship to student outcomes.

The Study Focus on Student Outcomes and Program Effectiveness

As noted, the focus of the study involved an examination of specific outcome indicators as well as program effectiveness indicators that relate to outcomes for students with disabilities in high school settings. This focus reflects a recognition that compliance with the requirements of federal and state laws is not enough to ensure that all children achieve an appropriate education and develop the capability to live as full, participating members of the community. All constituencies are sensing the need to examine the outcomes of secondary special education and the need to better understand the conditions associated with quality programming. The study focus also reflects the emphasis on accountability that emerged from the excellence movement and school effectiveness studies in regular education. Within special education, the accountability issue has increased the attention given to the education outcomes of students with disabilities as increasing numbers of educational stakeholders have demanded information about the results achieved through special education programs and services.

Most educators would agree that the major goal of an effective educational program is the development of individuals who are able to function successfully in society and be contributing members of the community. To ensure that all students attain as productive a lifestyle as possible, effective secondary programs foster high levels of student attendance and program completion, and nurture the development of academic, vocational, and social competencies commensurate with each student's potential. In addition, successful programs foster a sense

of satisfaction in the individuals who are major participants and stakeholders in the process -- students and school staff.

While most educators would agree on the major goals of effective educational programs, it is equally important to achieve common understandings about systematic methods for evaluating the effectiveness of such programs. Accountability and excellence require a clear focus on outcome and program quality indicators.

The Colorado Special Education Quality Indicators Project -- Framework for the Study

The Colorado Department of Education (CDE) began work on quality indicators for special education programs in 1987. Over the years, the Department has developed a number of indicators of quality schools. These were developed by a combination of state task forces and CDE staff. After many conversations with Colorado special education administrative units, the CDE initiated development of special education indicators.

Directors and staff of district special education programs were enthusiastic in their support of an effort that would help them evaluate program quality and outcomes at the local level. A task force of school district representatives was appointed to carry out the project. The indicator development project was intended to aid the state agency in producing cross-district summaries of the general quality and outcomes of special education services in Colorado, and also provide individual districts with information that would be useful in assessing program quality and in guiding program improvement.

The task force decided to base the Colorado indicators on the work of the Regional Resource Center National Panel on Indicators of Effectiveness for Special Education. Under a subcontract from the Mid-South Regional Resource Center (RRC), at the University of Kentucky, Dr. Mary Ann Lachat of the Center for Resource Management, Inc. (CRM) directed and coordinated the work of the national RRC Panel in developing the reference document **Effectiveness Indicators for Special Education**. The indicators included in the national document represented a refinement and expansion of a set of special education effectiveness indicators developed by CRM for the New Hampshire Special Education Program Improvement Partnership, a project sponsored by the Special Education Bureau of the New Hampshire Department of Education. The RRC document was designed to be a resource for all concerned audiences in their efforts to move beyond compliance to focus on the effectiveness of programs and services for students with disabilities.

Indicators were selected from the RRC document and were tailored to Colorado. The **Colorado Special Education Quality Indicators** document includes statements of outcomes and program conditions and practices associated with effectiveness. Major categories as developed in the original draft at the start of the present project are shown in Figure 1. The Colorado outcome and program quality indicators provided the content framework for the study.

FIGURE 1
Outline of Colorado Special Education Quality Indicators

Contextual Factors

1. Demographic
2. Resources

Policies and Practices

3. Policies and procedures
4. Resource allocation
5. Staff characteristics
6. Staff development
7. Leadership
8. Assessment, determination of services and placement
9. Instructional practices
10. School climate and organization of instructional setting
11. Parent participation
12. Interagency cooperation

Outcomes

13. Student performance
14. Satisfaction
15. Post-school outcomes

Assessing the Outcomes of Special Education Students

Assuming that successful completion of basic curricular requirements and educational objectives is a goal for all students, specific indicators such as absence, suspension, withdrawal, graduation, and grade performance provide important information about the progress students are making toward that goal. However, while many of these outcomes have been intensely studied in the general high school population, little is known about how they operate within the special population of students with disabilities.

The particular student outcomes investigated in this study reflect a concern for examining the effects of special education programming for students with disabilities at the high school level. Based on a literature review, a rationale for selecting these particular outcomes was presented in New Hampshire's recently completed study under the State Agency/Federal Evaluation Studies Program, **"An Evaluation of the Impact of Delivering Special Education to Students with Disabilities in Regular Education Placements"** (Lachat, M.A., Owings, M., and Lichtenstein, S., 1989). This rationale is summarized below.

Absence. Student absence is a major concern for the entire educational community. It continues to be a serious educational problem at all levels but especially in the high school. Studies have shown that absenteeism has been steadily increasing over the past several years (deJung, J. and Duckworth, K., 1986). Intensifying the concern about the problem has been the documented relationship between decline in student achievement and the increase in absenteeism (Caldwell, J., Huitt, W., and Graeber, A., 1982; Monk and Mohd, 1984). There is

growing recognition that the immediate results of missed opportunities to learn can contribute to cumulative decline, resulting in the ultimate failure of dropping out of school (Schellenberg, 1988).

While there have been few systematic studies of school nonattendance rates of students with disabilities, it is reasonable to think that absence is a problem for segments of this population as well as for their non-disabled peers. For special needs students, absence rates may be indicative of the difficulties they face in completing their educational programs.

Suspension. For 16 of the last 18 years, the U.S public has ranked discipline as the number one problem in the public schools (Gallup, 1986), and teachers view disciplinary problems as a significant concern (Gallup, 1984). In spite of the focus on discipline practices in public schools, little is known about the use of suspension as a disciplinary measure with non-disabled students, and even less is known about the uses of exclusionary discipline practices with disabled students. Only a few articles have discussed the uses of these procedures with handicapped learners (e.g., Adamson, 1984; Berry, 1981; Flygare, 1981; Zirkel and Gluckman, 1980).

New guidelines concerning suspensions of students with disabilities have been issued by the Education Department's Office of Civil Rights, defining suspensions of these students for more than 10 consecutive days as a change in the student's placement which requires special procedures (Education Week, 12/14/1988). Emerging principles based on court cases indicate the importance of following specific procedural guidelines and emphasize that: the learner may not be expelled if a specialized team determines the punishable behavior is related to the student's handicapping condition; and complete termination of educational services is not allowed during the exclusion period (Rose, 1988).

In-school suspension is increasingly being viewed as a more positive and viable alternative to out-of-school exclusion. This view reflects a recognition of the negative consequences of out-of-school suspensions and expulsions which include loss of instructional time, isolation from peers, and a loss of state aid based on average daily attendance (Chobot and Caribaldi, 1982). Rose (1988) points out that " The concept of in-school suspension was developed to counteract many of these negative side effects by providing instructional time and other support services, such as counseling, in the school context while, at the same time, removing the misbehaving student from the regular school routine." However, a 1988 study of students enrolled in a model in-school suspension program at some time during their high school careers indicated that less than 50% of these students completed high school (Johnston, J., 1989). The study also indicated a relationship between suspension and failing grades, concluding that academic failure was a critical issue for these students and was cumulative. Finally, the study also linked suspension with the potential for graduation, in that only one third of the students who had been assigned to the in-school suspension program were enrolled in the conventional track leading to a traditional diploma.

The lack of a strong knowledge base and the complexity of the issue have made it difficult to understand what leads students to the behaviors that result in suspension. Nevertheless, suspension among students with disabilities may suggest behavioral problems in adapting to the demands of a structured educational environment.

Withdrawal. Much attention in the popular and professional press has been directed to the plight of the high school "dropout". Estimates of the number of dropouts vary, and this may be partially due to differences in definitions of dropping out. The terms "dropping out", "withdrawing", and "exiting" have all been used to apply to those students who leave school before completing programs. While precise figures for nationwide rates of school leaving are difficult to obtain, it is not unreasonable to assume that as many as one-fourth of high school students fail to graduate (Plisko, V., Ginsburg, A., and Chaikinds, S., 1986). Findings from the second follow-up of the National Longitudinal Study, High School and Beyond, indicated higher dropout rates for students with mild to borderline disabilities than for non-handicapped students.

Recent state and local follow-up studies confirm a high attrition rate for students with disabilities and strongly suggest that the rate among special education students far exceeds that for the general school-age population. A Vermont study of a random sample of high school special education students indicated that 28% left school before age 18 and an additional 13% left after age 18 without their diploma (Hasazi, S., Gordon, L., and Roe, C., 1985). Levin, Zigmond, and Birch (1985) found that the dropout rate for students with learning disabilities in the Pittsburgh public schools approached 51%, far exceeding the 36% reported for the general population during this period.

The problem of premature school exiting was highlighted in the Eighth Annual Report to Congress (U.S. Department of Education, 1986) which suggested that many youths with handicaps "exit prior to the completion of the secondary program." To further investigate this problem, state education programs are now required to collect data on the number of youths with disabilities who exit prior to graduation as well as the reason for exiting.

Information on withdrawal rates of special needs students assists practitioners and policy makers to assess the holding power of programs and services. It also enables them to determine areas where intervention may be needed in order to promote program completion for this population.

Graduation. The problems of early school withdrawal are highlighted in the difficulties young people face when they try to secure employment without a high school diploma. Employability and economic self-sufficiency are difficult to attain without completing high school (Hess, R., 1987). Research has shown that many students who leave do so before the twelfth grade, and that general education students are more likely than special education students to graduate (Gampert, R.D. and Shore, R., 1988).

For disabled students, the attainment of a high school diploma may be problematic due to the fact that curricular modifications, made in their special education programs, may affect their completion of graduation requirements. It is sometimes the case that special education students are awarded certificates of achievement in lieu of regular diplomas. However, the receipt of a different type of diploma or certificate may affect their post-secondary education and employment opportunities (Bodner, J., 1987).

Student Grade Performance. Grades may not always be an accurate reflection of student achievement since they can be subjective and individualized. They do, however, represent the messages students receive about their performance throughout their school careers. Further, grading plays an important role in documenting the student's educational experience (Barresi and Mack, 1980).

Hess (1987) discussed the dilemmas associated with grading the performance of students with disabilities in regular education settings.

> While the increased integration of students with mild disabilities into regular education classrooms has in part fulfilled the intent of both statute and regulation it has created a dilemma for educators in terms of grading students with disabilities fairly and objectively . . . Given the variety of purposes or functions of grading, the added dimension of the challenge presented by students with disabilities, and the idea that grading is an important aspect in documenting the educational experience of students, assignment of grades has created and will continue to create much debate within the educational community. No single best practice has been identified to resolve the problems inherent in assigning grades to students with disabilities who make a sincere effort, but because of their disability simply cannot measure up to either the teacher's standard or the school's standard in terms of meeting all the criteria for a given course or class when traditional methods of assessment, instruction, and grading are used.

The importance of tracking grade performance is indicated by studies which indicate that early academic failure is a strong predictor of chronic failure in subsequent years. A recent study by Mason and Stipek (1989) confirmed the conclusion reached by Bloom (1964) and other investigators (Maruyama, Rubin, and Kingsbury, 1981) that from about the third grade on, students' grade performance in one year predicts their performance in subsequent years. This study also confirmed previous findings on the stability of students' self concepts (Shavelson and Bolus, 1982). Thus, poor grade performance contributes to the beliefs students develop about their own competency which contributes to the difficulty of reversing performance trends.

The importance of grades in tracking student progress is also suggested in the connection between early academic failure and eventual dropping out. A longitudinal study of students entering high school in 1979 indicated that "fewer than 10 percent of the students who dropped out began their high school careers with averages of 75% or higher" (Troob, 1979). In spite of the subjective difficulties associated with grades as performance indicators, the incidence of unsatisfactory grades in different curricular areas among students with disabilities may be indicative of their risk for eventual dropping out or long-term academic failure.

Student Satisfaction and School Experiences. There is not a large body of literature on student satisfaction, especially as it relates to students with disabilities in various settings. A growing body of research on peer acceptance, self-concept, and social-emotional outcomes of students in mainstreamed settings has focused primarily on students in the lower grades (1 through 6). Some of these studies suggest that integrated placements are superior to segregated placements with respect to students' social-emotional growth, but that disabled students in regular classes experience more rejection than their non-disabled peers (Madden, R. and Slavin, R., 1983).

The degree to which special education students express satisfaction with peer and teacher relationships as well as experience positive emotions and feedback from their schooling may not only impact on their cognitive and social development but also reflect their ability to function in a classroom environment. Further, the extent to which they participate in school/ community activities or feel they have the knowledge and skills required for independent living may be indicative of their overall adjustment to the regular school setting. Participation in school and identification with school is related to staying in school (Finn, J., 1989).

Questions Addressed by the Study

The major research questions posed for the study reflect the dual focus on student outcomes and indicators of program quality. Three areas of questions were posed in the study.

A. What impact or levels of student outcomes were found in the pilot schools, and what differences were found among subgroups on these variables?

B. What levels of the various quality indicators were reported in the pilot schools, and what differences were found between regular and special education staff?

C. Across the pilot schools, what were the relationships between indicators/practices and student outcomes?

The project was not designed to study variations in special education students' programming as related to outcomes and indicators. Rather, the project was designed to develop instruments for a global quality evaluation across schools and students and to look at levels and relationships among indicators and outcomes for selected subgroups. The major questions addressed were as follows.

A. Student Outcomes

What level of outcomes have been achieved through secondary special education programming in a sample of Colorado high schools in such areas as: attendance, suspension, dropout, and graduation rates; grade performance across all curricular areas; job preparation and independent living skills; students satisfaction with school; and school and community integration?

1. What were the overall levels of performance by students with handicaps?

   a. What were the grade performances of students with disabilities in curricular areas such as English/language arts, mathematics, science, social studies, and vocational education?

   b. For all twelfth grade special education students, what proportion received high school diplomas (as evidence of completing local school board requirements for graduation) versus "completing" high school with a certificate or other designation of completion?

   c. To what extent did special education students report they had acquired the skills needed to achieve successful community integration -- independent living skills and knowledge about employment and educational options?

   d. To what extent did special education students report they were satisfied with school, with their educational program, with their progress in school, and the way they have been treated in school by faculty, staff, and other students?

   e. To what extent did special education students report they had participated in school and community activities?

2. Did absence, suspension, withdrawal, and twelfth grade graduation rates of special education students differ from those of non-handicapped students?

3. Did performance and outcome measures of secondary special education students differ by disability category?

   a. Did absence, suspension, withdrawal and graduation rates of special education students with the following three major types of handicapping conditions differ: perceptual/communicative disabilities, mental retardation, emotional/behavioral disabilities?

   b. What was the grade performance of special education students in the three major disability categories in the areas of English/language arts, mathematics, science, social studies, and vocational education?

   c. Did survey responses of secondary special education students with three major types of disabilities (i.e., perceptual/communicative, mental retardation, and emotional/behavioral) differ in the following areas:

      1. Satisfaction with their school program and their relationships with other students?
      2. The degree of teacher expectations and teacher support they experience?
      3. Their level of activity in the school and community?
      4. The degree to which they felt that they had acquired basic knowledge and skills associated with independent living?

4. What relationships existed among measures of student outcomes and between special education student survey responses and their educational outcomes?

   a. What relationship existed between absence rates and grade performance in curricular areas for special education high school students?

   b. What relationship existed between incidence of suspension and grade performance in curricular areas for special education high school students?

   c. Was there a difference in the average absence rate of students who withdrew from school versus those who remained?

   d. Was there a relationship between the level of satisfaction with school reported by special education students and their absence rates, incidence of suspension, or withdrawal from school?

   e. Was there a relationship between the level of teacher expectations special education students report they experience and their absence rates, incidence of suspension, or withdrawal from school?

   f. Was there a relationship between the level of teacher support special education students report they receive and their absence rates, incidence of suspension, or withdrawal from school?

B. Quality Indicators

To what extent did regular education and special education staff report their school showed evidence of the indicators of special education program effectiveness in such areas as: resource allocation, policies and procedures, staff characteristics, staff development, leadership, program and curriculum, instructional practices, school climate, parent participation, and interagency cooperation?

5. What were the overall levels of quality indicators (practices and conditions) as reported in school staff surveys and in the school overview?

6. Did special and regular education staff perceptions of the frequency with which practices indicative of effective special education programming differ in the areas of:

   a. Resource allocation?
   b. Staff characteristics?
   c. Staff development?
   d. Use of assessment and placement?
   e. Use of specific instructional practices?
   f. School climate and instructional setting?
   g. Parent participation?
   h. Administrative leadership?
   i. Staff satisfaction?
   j. Student performance?

C. Indicators Compared to Outcomes

To what extent did secondary schools that had achieved higher levels of outcomes with students also demonstrate effectiveness in various school practices (indicators)?

7. What quality indicators (practices/conditions) were most related to student outcomes?

2. PROCEDURES

This section of the report describes the methodological approach followed in conducting the study. It provides: (1) a statement of the design of the study; (2) sampling procedures; (3) instrumentation; (4) data collection procedures; (5) data reduction and analysis; and (6) limitations in the study methodology.

Design of the Study

This study was an outgrowth of an emerging commitment in Colorado to evaluating the quality of special education programs. As such, it served as a preliminary step in a process of building the capacity of local school districts to systematically assess and improve programs and services on an ongoing basis. Although larger research and evaluation efforts are planned in the future, one focus of the present study was to examine and describe existing levels of special education programming at the secondary level based on student outcome and program quality indicators. The specific variables examined have been defined in the Colorado Special Education Quality Indicators. This indicator system provided a basis for linking the study questions to the data collection methodology.

Another focus of this study was to obtain information on the utility and viability of the indicator system for building a database that could be useful both for research purposes as well as for ongoing monitoring of special education programs. It was anticipated that the descriptive results of this study would enhance the capability of the Colorado State Department of Education (CDE) to provide technical assistance to local level special education program improvement and evaluation efforts. In cooperation with the schools who agreed to participate, the CDE had the opportunity, through this study, to systematically examine selected characteristics of the special education student population in those schools. It also explored how these characteristics related to each other and to indicators of effectiveness in special education programming. The feedback from these efforts not only contributes to upgrading research and evaluation capabilities at both the state and local levels, but also forms an integral part of establishing the political viability of future research and evaluation programs.

Sampling Procedures

High School Study Sites

The schools which participated in this study did so voluntarily. However, an attempt was made to secure involvement of schools from a variety of locations throughout the state, as well as with different size student enrollments. Table 1 shows the distribution of the fourteen participating schools by their location (i.e. urban, suburban, rural). Data for a fifteenth school, the Colorado School for the Deaf and Blind, was collected but subsequently it was decided not to include the school in the cross-school data analysis because its population was so specialized. Also shown in Table 1 are enrollment figures for Fall 1988 as well as the cumulative membership for the entire school year, based on figures reported annually to the CDE, and special education student counts as provided by the schools during the data collection phase of this study. The discrepancy between the Fall 1988 and the total year enrollment figures was due to the fact that the full year membership figures reflect the

cumulative count of all students who attended at any time during the school year, including those who transferred or withdrew for any reason.

TABLE 1
Total and Special Education Enrollment Figures
for 14 Colorado High Schools, by Location
Academic Year 1988-89

	Fall 1988 Enrollment		1988-89 Student Membership		Special Education Student Count	
Location	No.	%	No.	%	No.	%
URBAN (N=3)	4,822	(37.3)	6,793	(41.8)	334	(35.6)
SUBURBAN (N=5)	5,437	(42.1)	6,185	(38.1)	386	(41.1)
RURAL (N=6)	2,667	(20.6)	3,274	(20.1)	219	(23.3)
	12,926	(100.0)	16,252	(100.0)	939	(100.0)

It was generally true that schools in metropolitan and nearby suburban areas were those with larger enrollments, whereas the rural schools had smaller student bodies.

One of the fourteen participating schools was a junior-senior high school, serving grades seven through twelve. For some of the student outcome measures, calculations included grades seven and eight, due to the way data were reported by that school.

Student and Staff Samples

In this study, three groups of respondents were targeted for individual data collection efforts: special education students; special and regular education teachers, administrators, therapists, and related services staff. Each of these respondent groups was treated as a population; and everyone in each population was targeted to be surveyed. For the special education students, an additional data collection effort was undertaken in order to obtain information from their student records on absence, suspension, dropping out, graduation, and grade performance. Thus, for all special education students in the schools' records, information was obtained on their outcomes as well as their descriptive characteristics (i.e. handicapping condition, grade level, gender). Tables 2 and 3 describe the handicapped student samples. As Table 3 indicates, the handicapping conditions of the student sample closely paralleled the distribution of the statewide population. Statewide breakdowns of special education students by grade level, gender, and special education setting are not available. Using age as a grade level approximation revealed that 17.2% of special education students statewide were age-level equivalents of the 12th grade. This compares to 16.5% in the study sample. The state data on special education placement are kept according to how services are delivered, which is mostly through resource rooms. At least 22% of students statewide were in special (i.e., self-contained) settings. However, this study asked where the majority of the student's time was spent. Thus comparisons with statewide placement rates are not meaningful. Location of students statewide by special education administrative units were: urban -- 38.2%; suburban -- 38.7%; and, rural -- 23.1%. This suggests that the student sample was similar to the state population on this characteristic.

Although regular education students in the participating high schools were not surveyed individually, information on them was collected at the school level to be used for comparative purposes with special education students. Each school was asked to provide the number of absence periods, total number of enrolled days, number who received in-school suspensions, and number who received out-of-school suspensions for all the regular education students enrolled during the 1988-89 academic year. Although no breakdowns by individual student characteristics such as gender, grade level, or racial/ethnic background were possible, the aggregated, school-level data was complete for this population. Data on dropping out and twelfth grade graduation for this population was obtained from CDE annual records.

Response rates for each of the surveyed populations ranged from 65% for special education students to 81% for regular education staff. Non-response for students was primarily due to absence on the scheduled survey day or withdrawal from school for any reason. Similarly, non-response among staff was due to absence, especially for special education staff who served several schools.

TABLE 2
Descriptive Characteristics of Special Education Students
Who Participated in any Aspect of this Study: Percentage Distributions
by Grade Level, Gender, High School Location, Special Education Placement
N=939

Grade Level		Gender		HS Location		SPED Setting	
7th	.6	Male	68.6	Urban	35.6	Regular	71.8
8th	1.4	Female	31.4	Suburban	41.1	Special	28.2
9th	29.6			Rural	23.3		
10th	29.3						
11th	22.5						
12th	16.5						

TABLE 3
Distributional Comparison of Special Education Students Who Participated in this Study with Special Education Students throughout Colorado*, by Handicapping Condition

	Statewide 1987-88	Participating Special Education Students	
Perceptual/Communicative	50.6	58.7	(n=551)
Emotional/Behavioral	25.7	24.3	(n=228)
Mentally Retarded	12.1	9.2	(n=86)
Speech/Language	2.6	1.6	(n=15)
Other	9.0	6.3	(n=59)

* Figures taken from CDE state database for students ages 15-21

Instrumentation

The instrumentation used in data collection was based on the Colorado Special Education Quality Indicators, which were drawn from the national reference document, **Effectiveness Indicators for Special Education**. Developed under the auspices of the Regional Resource Center (RRC) National Panel on Indicators of Effectiveness for Special Education, this document was produced through a contract between the Mid-South RRC and the New Hampshire-based firm, Center for Resource Management, Inc. (CRM). The national document drew from an array of indicators developed by CRM for the New Hampshire Department of Education, Special Education Bureau. These indicators had been developed through a process which included extensive examination of special education and school effectiveness literature, and intense review by an expert panel of special and regular education administrators, teachers, and state department of education personnel.

The New Hampshire Department of Education had also contracted CRM to develop program evaluation instrumentation based on the effectiveness indicators. Because this indicator-based instrumentation was designed to collect information on educational programs and student outcomes similar to those proposed in this study, it was considered highly applicable.

The instruments used in this study were adapted from the New Hampshire instrumentation based on recommendations from a committee including representatives of the Colorado Task Force for Special Education Quality Indicators, as well as representatives from the participating school sites. Included in the data collection methodology were: a school program overview; student outcome data collection forms; student satisfaction and activity survey; student interview; and regular and special education staff surveys.

School and Program Overview

This instrument was designed to collect information on pertinent school and program characteristics, including total student enrollment; size of administrative, instructional, and service staff; number of special education students identified and their placements; special education program options; related services provided to special education students; grading and graduation policies; overall school philosophy; special education policies and philosophy; budget development; and interagency cooperation. The instrument was designed to be completed by school officials and/or special education administrators for the school. Appendix A contains the School and Program Overview instrument.

The sections of the Overview on special education policies and procedures and on interagency cooperation served as a basis for creating two school-level variables. Nineteen items in the overview survey dealt with different aspects of special education policies and procedures. They addressed areas such as Least Restrictive Environment, Transition Plans, Procedural Safeguards, Free Appropriate Education, and Special Education Philosophy. Three items related to interagency cooperation and involvement in special education planning: they addressed the areas of cooperation/coordination with community agencies, meetings with agency representatives, and interagency transitional planning.

Student Outcome Data Collection Forms

The forms and procedures for collecting information on student absence, suspension, dropping out, graduation, and grade performance were designed to be used by school staff who have access to student records. Procedures and forms for obtaining information about regular and special education students were different, because only the special education data were recorded at the individual student level. Recording forms for special education students asked for names of all students who received special education services during the 1988-89 academic year. For each student named, the following information was requested: (a) current grade level, (b) coded handicapping condition, (c) gender, (d) special education placement, (e) number of absence periods, (f) number of days enrolled in the school, (g) number of times receiving in-school suspensions, (h) number of times receiving out-of-school suspensions, (i) whether or not the student dropped out of school, (j) if a twelfth grader, whether received either diploma or certificate at graduation, and (k) grades received in four academic areas and vocational education during the previous semester in school.

For all regular education students who were enrolled at any time during the school year, school personnel were asked to report (a) the number of absence periods, (b) the number of enrolled days, (c) the number who received in-school suspensions at least once, and (d) the number who received out-of-school suspensions at least once. Information on dropping out and graduation for the total student population, which is reported annually to the CDE, was used to obtain counts of dropouts and high school graduates for regular education students. This was done by taking the reports for the total school population and subtracting out the equivalent information obtained for special education students.

Appendix B contains the Student Outcome Data Collection Procedures. Also included are the data collection form utilized to record absence, suspension, withdrawal, graduation, and grade performance for special education students and the form to collect absence and suspension information for regular education students.

Student Survey and Interview

The Student Satisfaction and Activity Survey was used to address study questions related to the satisfaction and school experiences of high school special education students. The instrument contained 71 items, divided into four sections. The first section contained twenty items and was designed to assess three dimensions of students' experience: their satisfaction with school in general, (including relationships with teachers and other students); the expectations they experienced from their teachers; and the support they received from their teachers. Students were asked to report how often the item statements were true for them, using the following scale: 1 -- Almost Never; 2 -- Not Very Often; 3 -- A Lot of the Time; 4 -- All of the Time. They were offered the option DK, Don't Know if they felt they could not answer the item.

The second section, including items 21 through 38, asked whether students had participated in eight extracurricular activities and ten community activities. The response requested was Yes or No. The third section contained eleven items and asked students to report how frequently they engaged in selected social activities. The response options were: At Least Once a Week, At Least Once a Month, At Least Once a Year, and Never. The last section, with 22 items, asked students whether they felt they had acquired basic knowledge and skills associated with independent living. For each item, they were asked to respond either Know a Lot or Need to Know More.

Procedures used by New Hampshire in constructing the student survey included a review of existing instrumentation to generate an initial pool of items that had been used in previous studies examining areas of similar inquiry. Some items were adapted and additional items were developed to construct a draft instrument. With the assistance of a reading specialist who had extensive experience working with students with disabilities, survey items were written at a fifth grade reading level.

The draft instrument was reviewed by researchers and by high school teachers, and the instrument was piloted with a sample of high school students with disabilities from a medium-sized high school near Denver. Based on the review and the pilot test, refinements were made.

Quantitative estimates of the instrument's reliability and validity have not been determined, although significant efforts were made to ensure its content validity.

An interview schedule was used to obtain more detailed information about the areas covered in the survey. Questions on the interview were constructed to relate to the study questions and to the survey items. Some items were included to explore relevant areas not examined through the survey.

Appendix C contains the Student Activity and Satisfaction Survey Instrument, as well as the Student Interview; the Instructions for Administration of each; the Student Interview Protocol; Preliminary Validation Procedures; and a Matrix showing the interrelationships between survey items and interview questions.

Regular and Special Education Staff Surveys

The regular and special education staff surveys were designed to reveal the extent to which teachers, administrators and related services staff felt that various conditions, practices and approaches associated with effective special education programming were evident in their school settings. There were two versions of the survey, one for regular education staff and a longer version with additional items for special education staff. The survey items directly matched statements in the **Colorado Special Education Quality Indicators**. The format of the survey was an adaptation of the New Hampshire instrumentation.

The Regular Education Staff Survey contained 106 items and the Special Education Staff Survey had an additional 40 items. Both surveys contained subsets of items relating to ten dimensions of the school experiences of staff: 1) resource allocation; 2) staff characteristics; 3) staff development; 4) administrative leadership; 5) assessment, determination of services, and placement; 6) instructional practices; 7) school climate and organization of instructional setting; 8) parent participation; 9) student performance; and 10) satisfaction. In response to the items in the first eight areas, staff were asked to report the extent to which the behavior or activity contained in each item statement was evident in their school situation, using the following scale: 1 -- Almost Never, 2 -- Seldom, 3 -- Sometimes, 4 -- Almost Always. Response options for the student performance scale were: 1 -- None of the students, 2 -- Very few students, 3 -- Some of the students, 4 -- Almost all of the students. For the satisfaction scale, the response format was: 1 -- Very Dissatisfied, 2 -- Somewhat Dissatisfied, 3 -- Somewhat Satisfied, 4 -- Very Satisfied. The option DK, Don't Know, was offered if respondents felt they could not respond because of lack of knowledge.

As stated above, these surveys were adapted from instrumentation utilized in New Hampshire, and some psychometric information is available for the New Hampshire instruments. A study was undertaken to determine the reliability of the Regular Education Teacher Survey, which contained 135 items, with seven subscales. Item wording and scaling were in many cases similar, though not always identical, to the Colorado instrumentation. Each of the subscales was separately subjected to both reliability and factor analyses. Results indicated that six of the seven subscales possessed a high degree of internal consistency reliability, with alpha coefficients ranging from .84 to .97, and that responses to items within each of these subscales appeared to be indicative of a general disposition toward a single factor. It was recommended that further research be conducted to validate these scales against external criteria, in order to determine the extent to which their variability correlates with other measures of effectiveness in special education.

Appendix D contains the Special Education Services Staff Survey; Regular Education Staff Survey; Procedures for Distributing/Administering each of the surveys; and Preliminary Validation Procedures.

Data Collection Procedures

Data were collected from six sources of information in each school:

1. Survey of all handicapped students through self-report questionnaire;
2. Interviews with a sample of 11th and 12th grade handicapped students;
3 Staff survey of all regular education and special education teachers and related services staff;
4. Overview information reported by a key respondent in each school;
5. Record data on each handicapped student (outcome data forms);
6. Record data aggregated for all regular education students.

The data collection was designed to provide information from the 1988-89 school year. Considerable variation existed among the participating schools in their record keeping practices. Most of the data were obtained or recorded by staff in the schools, following procedures laid out by the CDE project staff. Interviews were conducted by outside interviewers.

In the fall of 1988, each school was asked for a list of the students being served under the state Handicapped Children Education Act. These lists, totalling 939 students, were provided by the special education director of the administrative unit serving that school. These lists were then used in the spring as the starting place for identifying handicapped students.

Student Survey

All handicapped students in the school during the survey period were given questionnaires to complete. Students judged by the teacher as incapable of completing the questionnaires were excluded, but these were relatively few in number. They included three students reported as unwilling to cooperate and an unknown number of students, probably fewer than 10, with other significant identifiable emotional behavior disorder (SIEBD) students, which teachers elected to exclude. No reports were made of students physically unable to participate. Reports were made informally,, no listing was made of excluded students.

The project staff sent out the survey forms to each school with student ID numbers already entered when available, based on the preexisting list of students. Extra forms were sent for use with students not on the list. The ID numbers were the basis for matching survey responses to the student record data. Written directions for the teachers were sent with the forms as a follow-up to our telephone conversations with the special education contact person. Most students with more severe disabilities were able to complete the survey with help from the teachers. The teacher would read the item and either the student would mark the paper or the teacher would mark the response spoken by the student. Both in the pilot and the actual study, the teachers reported that students understood the questions.

Whether the survey was administered in a group or one-to-one, it was always explained to students that the survey was being used for a study to improve the school, and that the survey was not a test. Names were not written on the surveys, but grade and name of high school were written on the cover sheet. There were 601 student surveys completed, representing 65% of the handicapped student membership reported on the record data forms. Most of the students not surveyed had either already dropped out, transferred, or were not in school over the period of the survey.

In two high schools the principals postponed data collection until fall. In another high school the student surveys were collected without ID numbers, and so a second survey had to be administered in the fall. In these school with fall 1989 surveys the proportion of students in membership 1988-89 who completed useable surveys ranged from 32% to 45%, significantly lower than the rates in the spring survey schools.

Student Interviews

Field assistants were hired from four different graduate programs to help collect interview data. Once the forms were in final draft, the four field assistants plus the project staff met with Dr. Mary Ann Lachat from CRM to review the forms and to be trained to conduct the interview and record interview data. The field assistant's primary job was to conduct the interviews. The interviewer also was given a guide on how to summarize the results of the interviews for each school.

Using the grade (or age) information from the preliminary student list, the project staff randomly sampled two-thirds of the students who were in the 11th or 12th grade, with a minimum sample size of 10 students. If the sampled student was not available for interview during the days the field assistant was in the school, then a substitution was made from the preselected list of students plus any new students attending who were not on the list. In three smaller schools, there were so few such students that all 11th and 12th grade students were interviewed.

The interviewers set up their own schedule with each school. The interviews were conducted in April or May and took approximately 56 working days to collect 216 interviews in the 14 schools plus completing a written report summarizing results for each school. Each field assistant completed one school and sent the summary report to CRM for recommendations before completing the reports for other schools. The 216 interviews completed represented 60% of 11th and 12th grade students reported on the record data forms. Of the 216 interviews, an analysis was completed on the 189 which fell into the three major categories (mentally retarded, emotional/behavioral, and perceptual/communicative). There were only three or four cases reported by the interviewers where they questioned the quality of responses from the students in terms of understanding the questions and answering the questions.

Staff Surveys

The project contact person in each school was sent a set of staff survey forms for both regular and special education instructional and administrative staff, as well as related services personnel. Non-certified staff were not surveyed (aides, office workers, etc.). The forms were not coded with an identification number. All staff were asked to complete and return the forms to the office if the surveys were done individually. In other schools the surveys were completed at a staff meeting and handed in before the respondent left.

Overall, 65% of the special education staff and 81% of the regular education staff completed questionnaires. Within schools the lowest staff response rate was 40% and the highest was several schools with 100%. Special education related services staff who were itinerant or only part-time in the participating high school were least likely to complete a survey.

School and Program Overview

The overview form asked for student counts and for the presence or absence of specific services as well as written and operational policies. One key person coordinated filling out this form, although in some cases both the district special education director and the school special education contact or principal contributed answers to different sections.

Handicapped Students Record Data (Outcome Data)

Staff within each school provided the handicapped students record data on such items as grade, handicap, absences, suspensions and selected course grades for the most recent semester. Usually these data were collected by a combination of the special education contact for the school and/or a clerical person in the school office. The data took 38 working days to collect and record which averaged about 19 minutes per student.

The outcome record data forms provided a line for each student. Project staff filled out the student identification and known data from the fall report of students. The schools were asked to verify the information, to add any students who had been in school but were not on the list, and to delete any students who in fact were never in the school that year. Thus the list was intended to be a complete list of all handicapped students in membership during the year. The total student count for the 14 participating schools from the record data was 939 handicapped students. The number of students actually enrolled and in regular attendance at the time of the survey was not collected.

Regular Education Students Record Data

Each school was asked to compile information on suspensions, enrollment days, and absences for all regular education students for the year. Data on dropouts and graduation for the total school were already available in the CDE data base. Schools varied widely in their manner of recording attendance, as there are no Colorado state rules about attendance or attendance reporting. Written instructions and a form were provided to each school, and telephone contact was made to offer assistance. While the report asked for regular education student data only, in a couple of schools the data at the school could not easily be separated. In those cases, the study took the total enrollment data and backed out the counts from the handicapped student record data files, leaving just the regular education counts.

Data Reduction and Analysis

Student Absence, Suspension, Dropout, and Graduation Data

The present study utilized the method employed by the Colorado Department of Education when computing rates based on student enrollment. The CDE uses, as the base, total membership figures, which include all students who were ever enrolled during the entire academic year. As noted earlier, this school membership figure may differ from the number of students enrolled on an average day, because it includes those who transferred in or out during the year, those who withdrew for any reason, as well as those who remained throughout the year. These discrepancies are considered to be due to the mobility of students. Using this base, however, assumes that any student, regardless of how long they were enrolled, had the opportunity for being absent, suspended, or dropping out. For graduation rates, the base excluded transfer students.

Calculation of absence rates was based on information provided by each school on the total number of periods absent for all ever-enrolled regular and special education students and the cumulative number of days they were enrolled. [NOTE: regular education data was aggregated at the school level, while special education data was collected on individual students.] The number of required days in the school year and the number of periods in a day were obtained in the school-level data collection. To adjust for differences among schools in the number of periods in an average day, absence periods were converted to absence days by dividing the reported number of periods absent by the number of periods in a day. The number of absence days was summed over all schools, taken as a proportion of the cumulative enrollment days aggregated across all schools, then converted to a percentage. This absence rate, then, represented the percentage of total enrollment time that students were absent. This calculation was performed separately for regular and special education students. Special education rates were broken down by type of handicapping condition. Absence rates referred to all seventh through twelfth graders in the participating schools.

For special education students, individual absence rates were also computed. The number of days or periods absent for each student was divided by the number of days or periods that student was enrolled, and multiplied by 100. This rate was used in relational analyses.

Suspension incidents were reported separately as in- or out-of-school suspensions. In-school suspension rates were computed by aggregating across all schools the number of students who received in-school suspensions at least once. This figure was then divided by the total number of students ever-enrolled in all schools during the academic year. Out-of-school suspension rates were computed by following the same procedure, except the numerator represented aggregated out-of-school suspensions. Both proportions were converted to percentages. This calculation was performed separately for regular and special education students. Special education rates were broken down by type of handicapping condition. Suspension rates also referred to all seventh through twelfth graders in the participating schools.

For special education students, the number of times the student was suspended (combining both in-school and out-of-school suspensions) was recorded. This variable was recorded into the following three categories for relational analyses: not suspended; suspended once; suspended at least twice.

Dropout rates represented the percentage of ever-enrolled, ninth through twelfth grade students who left school during the academic year for reasons other than (a) transferring to another school or educational program, (b) excused illness, or (c) death. The dropout rate base for regular education students was obtained by subtracting out handicapped counts from figures contained in CDE records of total school membership in the ninth through twelfth grade for the academic year, 1988-89. Rates were calculated separately for regular and special education students, and disaggregated by type of handicapping condition.

For special education students, the withdrawal variable indicated whether or not a student transferred, dropped out, or left school for other reasons. For relational analyses, it was used as a categorical variable, indicating whether the student dropped out, withdrew for "other" reasons, or did not withdraw.

Graduation rates were computed by taking the number of twelfth grade students who received diplomas or certificates as a percentage of the total twelfth grade enrollment during the academic year, minus those who transferred. Twelfth grade enrollment figures were based on CDE records for 1988-89. Again, figures for regular education students were obtained by subtracting equivalent information for handicapped students from the total twelfth grade enrollment figures. Rates were calculated separately for regular and special education students, and disaggregated by type of handicapping condition.

Special education students who reach twelfth grade age may continue in school until age 21 or until they are graduated. Students who do not graduate but who completed the year are not counted as dropouts. If these students reach age 21 without graduating, they are still not counted as dropouts, simply as non-completers. Since these students cannot be legitimately counted as dropouts, the effect on annual dropout rates is neutral. However, graduation rates are lowered by non-completers.

Differences in absence, suspension, dropout, and graduation rates between regular and special education students, and among special education disability groups, were analyzed by means of significance tests for proportions or chi-square analysis. A significance level of .05 was utilized.

Grade Performance

Based on grades contained in their academic records, special education students were classified as being either above satisfactory, satisfactory, or below satisfactory in each of four academic curricular areas, and in vocational education. Cutoff points for each of the grade performance categories were as follows:

Above Satisfactory	A, B
Satisfactory	C, Satisfactory, Pass
Below Satisfactory	D, E, F, Unsatisfactory, Fail

Descriptive analyses were performed separately for each subject area, and breakdowns for the three handicapping conditions were produced.

Analyses were also performed to examine relationships among the special education student outcomes. Using individual absence rates, a comparison of the mean absence rates for special education students who dropped out, withdrew for "other" reasons, or who remained was

performed. Similarly, the average absence rate for special education students in each of the grade performance categories was compared. This was done separately for each of the subject areas. Group mean comparisons were performed using analysis of variance. The significance level was set at .05.

A contingency table analysis was performed to examine the relationship between grade performance and suspension. The grade performance distributions for each category of the suspension variable were compared using the chi-square statistic. Separate analyses were performed for each of the subject areas. A significance level was set at .05.

Student Satisfaction

Special education students' responses to 20 items relating to three dimensions of their school experience were analyzed. The three dimensions were reflected in three subscales which comprised the first section of the student survey. They were (1) satisfaction with school, (2) teachers' expectations, and (3) support from teachers. For each of these three dimensions a composite score was produced for each student, which was the average of the responses to the items composing the subscale[1]. In all cases when scale scores were computed across items for students, if any item was not answered or the DK response was chosen, the scale average was computed only on the number of items actually answered.

For each of the three subscales, the mean of the composite scores was produced for the total special education sample, as well as for the three handicapping conditions.

Student Activities

Special education students were asked whether or not they participated in eight school-related and ten community activities. For each student a school activity and a community activity score was produced. Each of these scores represented the percent of items to which the response Yes was provided. The mean response for all special education students, as well as for the three handicapping conditions, was computed for each activity score.

Participation in Social or Community Activities

Special education students were asked to report how frequently they participated in 11 social or community activities. Percentage distributions across the 4-point Likert response options were produced for each of the items, and broken down by the three types of handicapping conditions.

Perception of Independent Living Skills

Special education students were asked to respond whether or not they felt they possessed selected knowledge and skills related to living independently in the community. For each student, a composite score was produced by computing the percent of his/her responses which

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[1] Student and staff survey item frequencies are not included in this report. Contact the writers for further information.

were Know a Lot. The mean of these composite scores was produced for the total special education sample, as well as for the three handicapping conditions.

Comparative analyses on all of the survey measures, except frequency of participation in community activities, were conducted using analysis of variance to examine differences among mean responses of the three handicapping conditions. Significance level was set at .05.

Relational analyses were also performed to examine how special education students' responses to the three subscales on section one of the survey related to their educational outcomes. The composite scores on each of the three subscales (i.e. satisfaction, teacher expectations, and teacher support) were correlated with individual students' absence rates. Also, the relationship between suspension and student survey responses was examined by comparing the mean composite score on each subscale for students with zero, one, and two or more suspensions. Finally, the relationship with dropping out was examined by comparing the mean subscale score for students in the three categories of the withdrawal variable. Each of these comparisons was performed by means of analysis of variance, and each of the three subscales was analyzed separately. Significance level was set at .05.

Staff Perceptions of Program Effectiveness

Regular and special education staff were asked to report the frequency with which selected conditions and practices reflective of effectiveness in special education programming were evident in their school settings. The survey instrument addressed ten areas: 1) resource allocation; 2) staff characteristics; 3) staff development; 4) use of assessment and placement; 5) use of specific instructional practices; 6) school climate and instructional setting; 7) parent participation; 8) administrative leadership; 9) staff satisfaction; and 10) student performance (i.e. staff perceptions of student performance in six areas). For each person, a composite score for each of the ten subscales was computed by averaging the responses to the items within each subscale. Again, when a person did not answer an item (or items) or elected to respond don't know within a subscale, the composite score was the average of responses to items actually answered. For each scale, a minimum number of items was determined to be essential to obtaining a valid composite score. The numbers of items utilized as criteria for including a person's composite in a subscale analysis were as follows: instructional practices (8); leadership, school climate, satisfaction (6); resource allocation, staff characteristics (5); parent participation, student performance (4); staff development (3); assessment and placement (2).

A comparison of the responses of special and regular education staff to common items in each of the ten areas was performed using analysis of variance. The difference in mean response for each of the groups was analyzed separately for each of the ten scales. A significance level was set at .05.

For school-level analyses of correlations between staff ratings of quality indicators and special education student performance, the mean rating of all staff within a school was computed for each of the ten subscales. The correlations between school-level quality indicators, two indicators from the School and Program Overview, and the special education student outcomes. This analysis was conducted to explore the types of associations which may exist at the school level among the study variables. The size of the sample (N= 14 schools) restricts the number of associations which may reach statistical significance, but, since the purpose was to look for trends, a more liberal significance level (.10) was used.

School and Program Overview

Two variables were created based on responses of a key informant in each school to items asking about special education policies and procedures and interagency cooperation. Each school had a value on each of these variables that was computed by taking the percentage of the total number of items to which the response Yes -- Operational was given. [See section under Instrumentation for a more complete description of the items in each variable.]

Limitations in Study Methodology

The Study Sample

This research project was not designed to produce statistical estimates of quality indicators for the total state. It was designed to look at interrelationships among variables within a typical or representative group of high schools. Thus schools representing a variety of geographic regions, urban, suburban, and rural settings, and enrollment sizes were solicited to participate. Table 3 under Sampling Procedures above shows that the distribution of handicapping conditions in the student sample compared favorably to the distribution of handicapping conditions for high school students in the state as a whole.

Within each school the study was designed to collect 100% samples of staff and of students with handicapping conditions. A variety of losses occurred due to availability of students during the collection period and due to varying degrees of willingness among the teachers and staff. The student absence rate in the inner city schools was particularly high. Overall, response rates were satisfactorily high as described in the Data Collection Procedures section above. Nevertheless, because of these issues relating to sampling, it is important to recognize that statistical procedures which are based on certain probabilistic and distributional assumptions are applied and interpreted with caution.

Survey Instruments

The staff and student survey instruments employed in this study were adapted from existing instrumentation used in New Hampshire. Because of this, the development phase of instrument construction was abbreviated. There is some evidence of the psychometric qualities of the New Hampshire teacher instrument. However, no such information is presently available for the student survey. Without such evidence, the use of the student survey in this study would best be considered as exploratory, and the results it produces preliminary. Further, because the New Hampshire teacher survey possesses respectable reliability, the adaptation used in this study might be considered a type of validity study. Part of the purpose of the study was to collect more extensive responses to the instruments for use in future revisions.

Certain outcome data for students were difficult to collect and analyze. Attendance as an outcome measure was not a consistently measured variable in Colorado, nor will it be in the future. Grades, taken from transcripts, are difficult to aggregate and treat as a common measure across schools. However, other, more meaningful, measures of achievement and performance do not commonly exist. Measures of outcomes which are considered meaningful and valid to both special education faculty and students as well as to parents and the community continue to be areas of need and future development.

The study initially planned to collect information from the IEP for each student. A form was developed to look at the kinds of objectives being listed, but early on it was decided not to try to collect detailed information on objectives accomplished. During the early stages of the project, staff from New Hampshire shared with us that their collection and analysis efforts with their IEPs had not proved workable. The data collected was not considered a reliable or a valid measure of student outcome or quality. Therefore the IEP data collection was dropped from this project's plans and the granting office informed. Work in Colorado in another initiative continues to look at IEPs, but to date it remains seen as not a promising source of quality indicator information across school districts.

Data Accessibility and School Record Keeping

No policy or confidentiality problems arose regarding access to data during this project. Accessibility issues regarding surveys had to do with availability (absenteeism) and willingness of the individual to fill out a survey form. The participating schools all were very cooperative in arranging distribution through meetings, by handouts, or during class periods. The data were collected in late spring.

The record data for each handicapped student proved reasonably easy to obtain from school records. In some cases, it did involve two or three different offices or systems within the school.

Record data on suspensions and attendance for the whole school was somewhat more difficult to obtain. Most schools keep a common computer file at this time, and had to remove the handicapped students' data. Where the systems used had little or no flexibility, at least as far as school staff could control, providing the aggregated school data was difficult. Using measures such as suspension and attendance, which are defined differently at each school, somewhat confounds analysis across schools.

The other data limit was on handicapped students who had enrolled and then left during the year. Not all such students were tracked and some had missing attendance and other data, leaving blanks in the record data file. For the 939 students reported in membership during the year on the record data forms, missing data rates included: attendance -- 2%; special education setting -- 4%; and, grade level -- 3%.

The question in all cases of missing data or non-response is: Are those persons not in the analysis significantly different from those in the sample? The results reported below are limited to the schools in the sample. However, the schools and populations studied were a good cross section of Colorado schools, and the response rates were fairly high, allowing confidence in generalizations at least within the participating schools and similar schools.

3. STUDY FINDINGS

What were the overall levels of performance by students with handicaps?

What were the grade performances of students with disabilities in curricular areas such as English/language arts, mathematics, science, and social studies and vocational education?

Grade performance in all five curricular areas was not available for all of the special education students who participated in this study, nor was it always possible to determine from a student's record whether or not a course was actually taken, if the course was completed or dropped, or whether a grade was withheld for any reason. Not all students were taking classes in each subject area during the previous semester. Based on information for students who had grades versus those with did not, availability of grades appeared to relate to a student's grade level, handicapping condition, and special education placement.

A table showing a comparison of participating special education students who had grades and those who did not, for each curricular area, by selected descriptive characteristics appears in Appendix E, Table E-1. This table shows that the percentage of students who actually had grades in the academic areas ranged from a low of 46% in science to a high of 77% with grades in English/language arts. In both science and mathematics, eleventh and twelfth graders were less likely than ninth and tenth graders to have grades. In fact, among twelfth graders, only about a fourth had grades in mathematics and science. However, the eleventh and twelfth graders were more likely than their younger counterparts to have grades in vocational education, even though over half at all grade levels had no vocational education grades.

Differences in grade availability were also noticeable among students with different disabilities. In the areas of English/language arts and science, students with perceptual/communicative disabilities were more likely than those with emotional/behavioral problems or mental retardation to have grades. Mentally retarded students were more likely than students with either perceptual/communicative or emotional/behavioral disabilities to have grades in the area of vocational education, but less likely to have social studies grades.

Notable differences in grade availability also existed for students in different special education placements. In the basic academic areas except mathematics, mainstreamed students were more likely than those in special settings to have received grades. In vocational education, the opposite was the case.

In spite of these differences in availability of grades, it is important to recognize that the grade performance samples closely paralleled the total sample of special education students who participated in this study, in that the majority were male, received their instruction in regular education classrooms, and had perceptual/communicative disabilities.

As indicated by the differences in available grades for the five curricular areas, analyses of the five areas were based on different sample sizes, with some of the same students included across the different areas. Table 4 presents the grade performance distributions in five curricular areas of all special education students who had received grades. In all academic areas, the distributions of performance were similar. Remember that A and B grades were 23

of D, E, F, Unsatisfactory, and Fail were coded as Below Satisfactory. About a fourth of the graded students received above satisfactory grades, and about two-fifths had below satisfactory grades. In the area of vocational education, the distribution of grade performance indicated that half of these special education students received above satisfactory grades, and a fifth received grades below satisfactory. However, as many as half of the ninth graders performed below satisfactory in English/language arts, science, and social studies; and the same proportion of tenth graders performed similarly in mathematics and social studies.

TABLE 4
Grade Performance Distributions of High School Special Education Students
Who Received Grades: Five Curricular Areas
Academic Year 1988-89

	Above Satisfactory	Satisfactory	Below Satisfactory
English/Language Arts (n=709)	28	30	43
Mathematics (n=558)	24	30	46
Science (n=427)	27	26	46
Social Studies (n=559)	23	29	48
Vocational Education (n=312)	51	30	20

Eleventh and twelfth graders were less likely than ninth and tenth graders to get below satisfactory grades in vocational education. Twelfth graders were more likely than those in other grades to perform above satisfactory in this area, with three-fifths having grades in this category. See Table E-2 in Appendix E for grade level breakdown of grade performance data.

Responses made by students who were interviewed provide some interesting insights into the grade availability and performance for these students. They were asked what courses they were currently taking and whether they received instruction in regular classrooms or resource rooms. At least nine-tenths of the respondents reported taking English/language arts, whereas only about half reported taking science and vocational education. Ninety-five percent of all mentally retarded students took mathematics, but only half of those with perceptual/communicative and emotional/behavioral problems did. Nearly half of mentally retarded students reported taking social studies, while one-fourth of perceptual/communicative and one-sixth of emotional/ behavioral students did.

In all subject areas, mentally retarded students more frequently received instruction in resource rooms than in the regular classroom, whereas students with perceptual/communicative and emotional/behavioral disabilities were in regular education placements more often than in resource rooms for their instruction. According to responses provided in the Program Overview survey, most schools use different grading standards for special education students who receive instruction in resource rooms. That is, these students are not graded on the same standards as regular education students. For special education students in regular education classrooms, many schools use a modified grading plan, in which grading depends on the needs and capabilities of the special education student.

Of further interest are interviewed students' self-reports of their current grade performance. As might be expected, these were more favorable than the grades obtained from their school records for the previous semester. In all subject areas, at least 80% reported receiving satisfactory (70 or above) grades.

To what extent did special education students report they had acquired the skills needed to achieve successful community integration – independent living skills, and knowledge about employment, and educational options?

To what extent did special education students report they were satisfied with school, with their educational program, with their progress in school, and with the way they have been treated in school by faculty, staff, and other students?

To what extent did special education students report they had participated in school and community activities?

Before discussing the results from the student survey, a brief description of the students who were surveyed is presented. Although the study was designed to obtain responses from all students in the participating high schools, a variety of losses occurred due to transfers, scheduling conflicts and absenteeism, resulting in a surveyed sample of 601, or two-thirds of the total number of participating special education students enrolled during the year. A comparison of surveyed and not surveyed students, by selected descriptive characteristics appears in Appendix F. Students with perceptual/communicative disabilities were slightly overrepresented in the survey sample, and those with emotional/behavioral disabilities were slightly underrepresented. Grade level, gender, and special education placement differences between the surveyed and unsurveyed students were not significant.

It is important to note again that the special education students who were surveyed were similar to the total special education sample, in that the majority were male, received instruction in regular education classrooms, and had perceptual/communicative disabilities.

Table 5 provides the mean composite scores on six subscales of the student survey for the high school special education students who were surveyed in this study. The first three variables measured students' attitudes and opinions about three aspects of their school experience – satisfaction, expectations, and support from teachers, which were based on responses to the first 20 items of the survey. To provide a frame of reference for understanding the means of these variables, recall that the response options represented the frequency with which the item statement was true for the student. The four-point, Likert scale was: 1 -- Almost Never; 2 --Not Very Often; 3 -- A Lot of the Time; and, 4 – All of the Time. As shown in the table, the responses for these variables averaged around three. It appears that the average special education student who responded to this survey experienced satisfaction with his/her school experiences, felt that his/her teachers held high expectations for him/her, and received support from his/her teachers, a lot of the time.

These views were generally reflected in responses of the interviewed students. All of the mentally retarded students, 87% of the perceptual/communicative, and 66% of the emotional/ behavioral students reported being satisfied with their overall relationships at school. About half of each group reported that their teachers made them work hard and the majority said that teachers care about their success.

TABLE 5
Mean Composite Scores of High School Special Education Students on Six Subscales of Student Survey

	Mean	SD	N
Attitude/Opinion Scales			
Satisfaction	2.89	.541	570
Teachers' Expectations	3.07	.545	570
Support From Teachers	3.08	.583	570
Participation/Knowledge Scales			
School Participation	47.1	26.17	570
Community Participation	72.7	21.40	570
Knowledge of Independent Living	71.2	22.98	567

The last three variables shown in the table represented students' participation in particular activities and knowledge of independent living skills. Scaling was based on the percentage of items (i.e. activities, knowledges) on each of the three subscales to which an affirmative response was given. The mean response on the school participation variable was 47.1%. This indicated that the average special education student surveyed here participated in roughly four of the eight school-related or extracurricular activities listed. On the community participation variable, the mean response was 72.7%. So, on the average, this sample of special education students participated in about seven of the ten out-of-school activities. Finally, the mean response on the knowledge of independent living variable was 71.2%, indicating that the average student responded know a lot to nearly 16 of the 22 items related to activities necessary for supporting oneself and living independently. It should be noted that self-reports of independent livving skills are likely to be more favorable than is generally the case.

Did absence, suspension, withdrawal, and twelfth grade graduation rates[2] of special education students differ from those of non-handicapped students?

For all twelfth grade special education students, what proportion received high school diplomas (as evidence of completing local school board requirements for graduation) versus "completing" high school with a certificate or other designation of completion?

Table 6 reports the absence and suspension rates of regular and special education seventh through twelfth grade students who participated in this study. The absence rate for special education students was slightly higher than that for their non-handicapped peers. Special education students were absent 9.3% of their total enrollment time; for regular education students this figure was 7.2%.

[2]All rates are expressed as percentages.

TABLE 6
Absence and Suspension Rates of Regular and Special Education High School Students*
Academic Year 1988-89

	Absence	In-School Suspension	Out-of-School Suspension
Regular Education (N=15,363)	7.2	3.9	3.9
Special Education (N=939)	9.3	3.4	16.0

* One junior-senior high school was included in the sample

The CDE reported an average public school attendance rate of 92% during the years 1981-1987. This would translate into an absence rate of 8%. The rate reported here for special education students exceeds the statewide rate, but that for regular education students is slightly lower.

While in-school suspension rates did not differ for the two populations, out-of-school suspension rates did differ. Special education students were four times as likely as regular education students to have received out-of-school suspensions at least once during the academic year. About one-in-six special education students received out-of-school suspensions, but this figure was one-in-twenty-five for regular education students.

Dropout rates for ninth through twelfth grader regular education and handicapped students in the study are presented in Table 7. The rates for special education did not differ significantly from those for regular education students. An annual dropout rate of about 5.7% for all students in the study schools for the academic year 1988-89 is lower than the statewide rate of 6.8% for tenth through twelfth graders reported by the Colorado Department of Education for the 1988-89 year. The difference between the two rates may be partially explained by the fact that the dropout rate reported in this study included ninth graders (whose annual rate, according CDE data, is slightly lower than upperclassmen's). Also the statewide rate included students from alternative schools and who, according to figures reported by the CDE, had a much higher dropout rate than graded students. If the statewide rate were recalculated and ninth graders were included, the dropout rate would be 6.0%, which compares favorably with the rate found in this study for all students.

TABLE 7
Dropout Rates of Regular and Special Education High School Students**
Academic Year 1988-89

Regular Education (N=15,325)	5.7
Special Education (N=920)	5.9

** Figures include ninth through twelfth grade only

Table 8 gives graduation rates of twelfth grade regular and special education students. Special education students were less likely than regular education students to receive diplomas, and more likely to end twelfth grade with neither a diploma nor a completion certificate. During the 1988-89 academic year, 92.5% of regular education students and 73.3% of special education students received diplomas.

TABLE 8
Graduation Rates of Twelfth Grade Regular and Special Education High School Students, by Type of Certificate Received
Academic Year 1988-89

	Graduation with Diploma	Graduation with Certificate	Status Unknown
Regular Education (N=3,096)	92.5	0.8	6.8
Special Education (N=150)	73.3	0.7	26.0

A third of the participating schools reported that they award certificates in lieu of diplomas to twelfth grade special education students who do not meet graduation requirements. About half of the schools said that only some of the special education students were required to meet the same criteria as regular education students to obtain a diploma. Despite the fact that some schools reported awarding certificates in lieu of diplomas for special education students, only one (0.7%) special student in this study was recorded as having received a certificate. One-fourth of the special education twelfth graders in this study were reported as having received neither diploma nor certificate, possibly because many of these students were continuing in school past their senior year.

Did performance and outcome measures of secondary special education students differ by disability category?

Did absence, suspension, withdrawal, and graduation rates of special education students with the following three major types of handicapping conditions differ: perceptual/communicative disabilities, mental retardation, and emotional/behavioral disabilities?

Absence and suspension rates of special education students with different types of disabilities are presented in Table 9. Although the rate for the emotional/behavioral category was higher than the others, the three handicap groups did not differ significantly in their absence rates. However, as reported earlier, absence rates for handicapped students did significantly exceed those for the non-handicapped. Based on the breakdown data, it appears that this difference was due to the relatively high absence rate for students with emotional/behavioral disabilities. The absence rate for these students was 13.2%, almost twice as high as that for regular education students.

TABLE 9
Absence and Suspension Rates of High School Special Education Students*,
by Type of Handicapping Condition
Academic Year 1988-89

	Absence	In-School Suspension	Out-of-School Suspension
Perceptual/Communicative (N=551)	8.5	3.8	12.9
Emotional/Behavioral (N=228)	13.2	3.5	26.8
Mental Retardation (N=86)	7.6	2.3	15.1

* One junior-senior high school was included in the sample.

In-school suspension rates for the three disability categories did not differ substantially, but there were distinct differences in out-of-school suspension rates. Students with emotional/behavioral disabilities were more likely than other disabled students to have received out-of-school suspensions at least once. Indeed, one-fourth of the special education students with emotional/behavioral disabilities in this study had received at least one out-of-school suspension. The comparable figures for students with perceptual/communicative disabilities and for mentally retarded students were about one-in-seven.

Dropout rates for special education students with different types of disabilities are presented in Table 10. Although the rate for students with emotional/behavioral disabilities was somewhat higher than those for other disability categories, none of the differences was significant.

TABLE 10
Dropout Rates of High School Special Education Students*,
by Type of Handicapping Condition
Academic Year 1988-89

Perceptual/Communicative (N=537)	5.0
Emotional/Behavioral (N=223)	9.0
Mental Retardation (N=86)	5.8

* Figures include ninth through twelfth grade only

Table 11 reports the percentage of twelfth grade special education students who received either a diploma or certificate or neither at the end of the year. Students with perceptual/communicative disabilities were more likely than those with emotional/behavioral disabilities and mentally retarded students to receive a diploma or certificate, and less likely to have received neither. Assuming that the "neither" designation implies that the student did not graduate, these figures indicate that half of the mentally retarded and emotionally disabled twelfth grade students in this study did not graduate during this academic year.

TABLE 11
Percentage of Twelfth Grade Special Education Students Who
Received Either a Diploma/Certificate or Neither, by Type of Handicapping Condition
Academic Year 1988-89

	Diploma or Certificate	Status/Unknown
Perceptual/Communicative (N=91)	81.3	18.7
Emotional/Behavioral (N=29)	51.7	48.3
Mental Retardation (N=14)	50.0	50.0

What was the grade performance of special education students in the three major disability categories in the areas of English/language arts, mathematics, science, social studies, and vocational education?

The table in Appendix G gives the grade performance distributions in five curricular areas for students in each of the three major disability categories. In all academic areas, students with perceptual/communicative disabilities were more likely to have received below satisfactory than above satisfactory grades. Between 40% to 48% fell in the lowest end of the scale, whereas between 22% and 30% received above satisfactory grades. The likelihood of below satisfactory grades was slightly higher in the areas of mathematics and social studies than for English/language arts and science.

In vocational education, half of the students with perceptual/communicative disabilities received above satisfactory grades, and about a fourth received grades below satisfactory.

Grade distributions for students with emotional/behavioral disabilities were somewhat lower than those for students with perceptual/communicative disabilities. In all academic areas, at least half to two-thirds received below satisfactory grades and slightly less than a fifth received above satisfactory grades. While nearly two-fifths received above satisfactory grades in vocational education, about a fourth received below satisfactory grades.

For mentally retarded students, grade performance distributions tended to be different from those for students with either perceptual/communicative or emotional/behavioral disabilities. In all academic areas, except science (which must be treated with caution because of the small sample size), mentally retarded students were more likely to have received above satisfactory than below satisfactory grades. Between 41% and 49% of these students fell in the highest grade performance category, while the percentage in the lowest category ranged from 26% to 39%. Further, two-thirds of these students received above satisfactory grades in vocational education, and a sixth had below satisfactory grades.

Some caution must be exercised in interpreting these grade performance results. First, because of the lack of a regular education comparison group, inferences about the nature and degree of some differences in special education student grade performance are not possible. Second, because of differences in content matter and difficulty, comparisons across curricular areas may be misleading. Third, in examining differences among the disability groups, the degree to which different grading standards were used for some students or whether some of

the courses taken were remedial is not known. Fourth, these figures do not account for sample differences across the grade levels; thus grade level comparisons may be misleading due to year-to-year changes in the composition of student groups. Finally, because many of the same students received grades in more than one curricular area, results across the areas should not be treated independently.

Did survey responses of secondary special education students with three major types of disabilities (i.e. perceptual/communicative, mental retardation, and emotional/behavioral) differ in the following areas:

1. *Satisfaction with their school program and their relationships with other students?*
2. *The degree of teacher expectations and teacher support they experience?*
3. *Their level of activity in the school and community?*
4. *The degree to which they felt that they had acquired basic knowledge and skills associated with independent living?*

To gain a comparative perspective on survey responses, Table 12 provides the mean composite scores on each of the subscales for the three major disability groups. Differences among the three groups were most notable between the emotionally handicapped and mentally retarded students. Students with emotional/behavioral disabilities experienced lower levels of satisfaction with school than the mentally retarded (Mean = 2.68 versus Mean = 3.09, for each group respectively). Further, mentally retarded students reported higher levels of teacher expectations and support than those with emotional disabilities. The mean composite responses on the expectations and support variables for mentally retarded students were 3.27 and 3.30, respectively. The corresponding figures for emotionally disabled students were 2.90 and 2.92.

TABLE 12
Mean Composite Scores of High School Special Education Students on Six Subscales of Student Survey, by Type of Handicapping Condition

	Perceptual/ Communicative (n=366)	Emotional/ Behavioral (n=108)	Mental Retardation (n=53)
Attitude/Opinion Scales			
Satisfaction	2.91 (.505)	2.68 (.556)	3.09 (.558)
Teachers' Expectations	3.07 (.510)	2.90 (.610)	3.27 (.539)
Support From Teachers	3.09 (.568)	2.92 (.620)	3.30 (.496)
Participation/Knowledge Scales			
School-Related Activity Participation	49.2 (26.60)	43.6 (24.38)	39.6 (22.70)
Community Participation	75.0 (19.78)	73.2 (21.25)	61.7 (23.27)
Knowledge of Independent Living	73.6 (20.83)	74.8 (20.31)	52.5 (26.35)

On both the school activity and community participation variables and the knowledge of independent living variable, means for mentally retarded students were lower than those for the other two disability categories, although the differences on the school activity participation variable were not significant. On the community participation variable, the mean for mentally retarded students was 61.7, whereas for students with perceptual/communicative and emotional/behavioral disabilities the means were 75.0 and 73.2, respectively. Similarly, on knowledge of independent living, the mentally retarded averaged 52.5, whereas students with perceptual/communicative and emotional/behavioral disabilities averaged 73.6 and 74.8.

In Appendix H, Table H-1 reports the distributions of response on items related to frequency of participation in selected community and social activities of special education students in the three major handicap categories. There was a tendency for mentally retarded students to report less frequent participation in activities such as attending sporting events and visiting with friends than students with perceptual/communicative or emotional/behavioral handicaps. Forty-four percent of mentally retarded students reported that they never attend a sporting event, whereas over 20% of students with perceptual/communicative or emotional/behavioral problems reported that they attend at least once a week, and at least another 30% reported attending at least once a month. Further, while about half of the mentally retarded students reported that they visit with friends either at their homes (55%) or at a local place (43%) at least once a week, a fifth to a third reported that they never do these activities. However, about seven-tenths of the students in the other two disability categories reported doing these activities at least once a week.

The lower level of participation in school activities, especially regarding sports, by mentally retarded students was reflected in their interview responses. Although half reported attending a sporting event, none reported participating in a school sport. A fourth said they participated in no school activities.

While 10% of the emotional/behavioral students reported no participation in school activities, 69% reported attending a sporting event and 40% played a school sport. For those with perceptual/communicative disabilities, 8% did not participate at all, 83% attended a sporting event, and 44% played a school sport.

What relationships existed among measures of special education student outcomes and between special education students' survey responses and their educational outcomes?

What relationship existed between absence rates and grade performance in curricular areas for special education high school students?

The table in Appendix I gives the mean absence rates of special education students in three grade performance categories for the five curricular areas studied. Note that the results from the five curricular areas reported here should not be treated as independent, because the grades analyzed for the five areas were based on many of the same students. In all five areas, students with below satisfactory grades had higher absence rates than those with satisfactory or above satisfactory grades. Further, the average absence rate for those in the lowest grade performance category was twice as large as that for students in the highest category. Absence rates for students with above satisfactory grades ranged between 5% and 6%, whereas for those in the lowest category of grades they ranged from 12% to 16%.

What relationship existed between incidence of suspension and grade performance in curricular areas for special education high school students?

Appendix J presents the grade performance distributions, for each of the five curricular areas, for students never suspended, suspended once, and suspended two times or more. Again, because many students were included in more than one subject area, the results for the five areas should not be treated independently. In the four academic areas, there was a clear tendency for students who were suspended to have a greater likelihood of being in the lowest grade performance category. This was true both for those suspended once as well as for those with at least two suspensions. In each of the four academic areas, between 61% and 72% of students who had been suspended received below satisfactory grades. For students who had not been suspended, this figure ranged between 38% and 44%. Also, students who had not been suspended were between two and three times as likely as those with suspensions to have above satisfactory grades.

In the area of vocational education, the percentage of suspended students who received above satisfactory grades, was greater than in the academic areas. However, the same tendency for suspended students to have a higher likelihood of below satisfactory grades and a lower likelihood of above satisfactory grades was evident. For example, suspended students were about twice as likely as those who were not suspended to have received below satisfactory grades.

Was there a difference in the average absence rate of students who withdrew from school versus those who remained?

The mean absence rates for special education students who dropped out, who withdrew for "other" reasons, or who remained in school are presented in Table 13. Not that, compared with sample sizes for those who did not withdraw, sample sizes for those who dropped out or withdrew for "other reasons" were relatively small. Among these three groups, dropouts had the highest absence rate, 20.5%, indicating that, on the average, they were absent one of every five of their enrolled days. Further, this rate for dropouts was more than twice as large as that for students who remained in school (9.0%).

TABLE 13
Mean Absence Rates of High School Special Education Students, by Withdrawal Status

	Mean	SD	n
Dropped Out	20.5	14.51	37
Withdrew, "other" Reasons	14.9	12.86	43
Did Not Withdraw	9.0	9.35	790

Was there a relationship between the level of satisfaction with school reported by special education students and their absence rates, incidence of suspension, or withdrawal from school?

Was there a relationship between the level of teacher expectations special education students reported they experienced and their absence rates, incidence of suspension, or withdrawal from school?

Was there a relationship between the level of teacher support special education students reported they experienced and their absence rates, incidence of suspension, or withdrawal from school?

Data to address each of these questions is presented in Tables 14 to 16. Correlations between absence rates and composite scores on the satisfaction, expectations, and support subscales of the student survey are presented in Table 14. It is readily seen that, although the magnitude of these correlations would be considered low, their signs were in the predicted direction. That is, all coefficients are negative, indicating that higher absence rates were associated with lower levels of satisfaction, expectations, and support. In spite of the weak nature of these relationships, this provides some support for the view that students who were absent more frequently were often those with less positive attitudes about school and about their relationships with peers and teachers.

TABLE 14
Pearson Correlations Between Absence Rates and Composite Scores on Satisfaction, Expectations, and Support Subscales of Student Survey
(N=552)

	Absence Rate
Satisfaction	- .193
Expectations	- .147
Support	- .153

Table 15 gives the mean composite scores on each of the three subscales for students not suspended, suspended once, and suspended at least twice. Students who were not suspended averaged a higher mean composite score on the satisfaction subscale than those who were suspended (2.93 versus 2.69 for those suspended once and 2.68 for those with two or more suspensions). Similarly, the average composite scores on the expectations and support subscales were higher for students not suspended than for those suspended either once or at least twice.

TABLE 15
Mean Composite Scores on Satisfaction, Expectations, and Support Subscales of Student Survey, by Incidence of Suspension

	Not Suspended (n=477)	Suspended Once (n=48)	Suspended At Least Twice (n=45)
Satisfaction			
Mean	2.93	2.69	2.68
SD	.545	.442	.496
Expectations			
Mean	3.10	2.94	2.86
SD	.549	.470	.524
Support			
Mean	3.13	2.88	2.77
SD	.560	.637	.638

Mean composite scores on the three subscales for students who did not withdraw, who dropped out, or who withdrew for "other" reasons are presented in Table 16. Because of the very small sample sizes for the latter two categories, these results do not lend themselves to meaningful interpretation. Nevertheless, they are presented here to maintain consistency with the proposed outline of study findings.

TABLE 16
Mean Composite Scores on Satisfaction, Expectations, and Support Subscales of Student Survey, by Withdrawal Status

	Did Not Withdraw (n=557)	Dropped Out (n=7)	Withdrew, "other" Reasons (n=6)
Satisfaction			
Mean	2.88	3.09	2.83
SD	.540	.742	.281
Expectations			
Mean	3.07	3.07	3.00
SD	.541	.971	.365
Support			
Mean	3.08	3.31	2.97
SD	.584	.742	.324

What were the overall levels of quality indicators (practices and conditions) as reported in school staff surveys and in the school overview?

The mean composite scores for the total staff sample, as well as for regular and special education staff separately, on the ten subscales of the staff survey are reported in Table 17. The means shown in this table were based on items in each subscale which were common to both the regular and special education staff surveys. Each staff person's composite score for each of the subscales was based only on his/her valid responses to the subscale items. Thus items which were skipped or for which the don't know response was chosen were excluded when computing the average for the item composite. For each subscale, a minimum number of items was determined to be essential to obtaining a valid composite score, and this number was established as a criterion for including a person's composite in the analysis of the subscale.

It can be seen that the means of the subscales range from 2.69 in the area of staff development to 3.36 for parent participation, with most subscales averaging at least three. Only the indicator categories of staff development and leadership (superintendent, principal, and instructional leaders) were rated below 3.0. Recall that the scaling of the response options for the items in eight of the ten scales was: 1 – Almost Never; 2 -- Seldom; 3 – Sometimes; and, 4 -- Almost Always. A mean of around 3.00 would then indicate that, on the average, the staff rated the indicators as sometimes evident in their school settings. The mean of 3.03 for the student performance subscale reflected the staff's opinion that some of the (handicapped) students achieved selected skills and abilities. The overall response to the satisfaction scale of 3.15 indicated that staff were at least somewhat satisfied with the special education programming in their schools.

TABLE 17
Mean Composite Scores of Regular and Special Education Staff*
on Ten Subscales of Staff Survey

	Regular Ed. Staff			Special Ed. Staff		All Staff	
	Mean	n		Mean	n	Mean	SD
Resource Allocation	3.11	432	(a)	2.91	81	3.08	.657
Staff Characteristics	3.14	557		3.18	80	3.14	.546
Staff Development	2.68	557		2.71	80	2.69	.845
Assessment/Placement	3.22	404	(a)	3.42	81	3.25	.631
Instructional Practices	3.11	539	(a)	3.29	81	3.14	.498
School Climate	3.20	578	(b)	3.33	81	3.21	.514
Parent Participation	3.37	276		3.35	81	3.36	.527
Leadership	2.95	557		3.01	77	2.96	.650
Satisfaction	3.15	480		3.13	80	3.15	.633
Student Performance	3.01	405	(b)	3.13	80	3.03	.512

* For both regular and special education, staff includes instructional/teaching staff, administrators, therapists, and related services personnel such as counselors, psychologists, social workers, and nurses.

(a) $p < .01$
(b) $p < .05$

For 2-tailed test of mean difference between regular and special education staff ratings

Did special and regular education staff perceptions of the frequency with which practices indicative of effective special education programming differ in the areas of:

a. Resource allocation?
b. Staff characteristics?
c. Staff development?
d. Use of assessment and placement?
e. Use of specific instructional practices?
f. School climate and instructional setting?
g. Parent participation?
h. Administrative leadership?
i. Staff satisfaction?
j. Student performance?

Also shown in Table 17 are the means on each of the ten subscales for the regular and special education staff separately. On half of the subscales, there was no significant discrepancy between the regular and special education staff perceptions. However, the mean response of the regular education staff on the resource allocation scale was higher than that for special education staff (3.11 versus 2.91, respectively). Apparently, regular education staff perceptions of resource availability and allocation were somewhat more favorable than those of special education staff.

On the other hand, special education staff responded more favorably than regular education staff on the assessment/placement, instructional practices, school climate, and student performance subscales. Special education staff opinions about the frequency with which indicators of effective programming in each of these areas were evident in their schools were slightly more positive than those of regular education staff.

What quality indicators (practices/conditions) were most related to student outcomes?

Table 18 shows the school-level correlations between the quality indicator scale scores and the special education student outcomes. The first ten indicator scales shown were the school avareges for the teacher reponses to the items in the teacher surveys. The quality indicator subscales each contain items of various conditions, practices, and approaches associated with effective special education programming. The scores on each subscale reflect the extent to which staff felt these practices were present in their school setting. The last two indicator scales were from the School and Program Overview reflecting the key respondents assessment in each school of the proportion of policy and procedures items which were in place in the school or school's district. This analysis was conducted to explore the types of associations which may exist at the school level among the study variables. It is important to keep in mind that the unit of analysis is the school. The size of this sample (N= 14 schools) restricts the number of these associations which may reach statistical significance, but since the purpose is to look for trends, a more liberal significance level was used. Any associations which have a probability level of .10 or less are asterisked in the table.

Several points are worth noting. First, absence rates had little, if any, relationship to staff ratings of quality indicators. Second, both suspension and dropout variables were consistently negatively correlated with the quality indicators. Although most of these associations were relatively weak, the signs of these coefficients indicated that the higher school suspension and dropout rates were associated with lower ratings on all the quality indicators. The only coefficient which reached significance (at the .10 level) was that between suspension rates and

parent participation. The negative correlation of -.477 indicated that higher school-level suspension rates were related to lower parent participation ratings.

A third point to be made is that graduation rates were positively related to the quality indicators and these associations were in the low to moderate range. Four correlations were above .40, and two of these were significant (at the .10 level). Thus, higher graduation (with diploma) rates were associated with higher staff ratings of parent participation, assessment/placement procedures, staff satisfaction, and staff characteristics.

Fourth, the correlations between quality indicator ratings and grade performance in English/language arts and mathematics were quite different. There was no relationship between the quality indicators and the proportion of special education students who received at least satisfactory grades in English/language arts. However, the correlations with mathematics were high, ranging between .540 and .783. These values indicated that higher staff ratings of the quality indicators were associated with higher proportions of special education students receiving at least satisfactory grades in mathematics.

The final point to note is that the correlations between the student outcomes and measures of interagency cooperation and school special education policy and procedures were mostly weak and do not reflect any coherent picture about the nature of the relationships among these variables. For example, the association between operational policies and procedures and English/language arts grade performance was positive and sizable (r=.569), indicating that a higher percentage of special education policies and procedures which are operational were associated with higher percentages of special education students receiving at least satisfactory grades in English/language arts. However, the positive correlation of the policies and procedures variable with both absence and dropout rates suggests a different picture, namely, that high percentages of operational policies and procedures were associated with higher absence and dropout rates. The relatively crude measurement of both the operational policies and procedures and interagency cooperation variables may be the reason for these somewhat discrepant findings.

TABLE 18
Pearson Correlations Between School-Level Quality Indicators and Special Education Student Outcomes
(N= 14 schools)

SUBSCALE	Absence	Suspension	Dropout	Graduation	English/ Lang. Arts	Math
1) Resource Allocation	-.242	-.183	-.297	.298	.079	.768***
2) Staff Characteristics	-.192	-.326	-.281	.444	.078	.703***
3) Staff Development	.251	-.031	-.120	.192	-.007	.645***
4) Leadership	.112	-.337	-.218	.257	.040	.540**
5) Assessment/Placement	.088	-.341	-.180	.463*	-.183	.640***
6) Instructional Practices	-.057	-.267	-.284	.396	.120	.770***
7) School Climate	-.003	-.254	-.309	.317	-.052	.714***
8) Parent Participation	-.097	-.477*	-.338	.478*	.061	.713***
9) Student Performance	-.226	-.380	-.106	.297	.260	.636**
10) Staff Satisfaction	-.171	-.292	-.367	.445	.016	.783***
Operational Special Education Policies and Procedures	.235	-.050	.322	-.058	.569**	-.134
Interagency Cooperation	.225	.291	.298	-.305	.325	-.228

* p <.10
** p <.05
***p <.01

4. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study was designed to collect information from a sample of Colorado high schools on the performance of students with handicapping conditions and on the degree to which various indicators of the quality of special education services were present across these schools. The questions posed were, in general, to what degree were positive student outcomes and quality indicators found, and what were the interrelationships.

This research project was not designed to produce statistical estimates of student outcomes or quality indicators for the entire state. Instead it utilized data collected from fourteen pilot schools to examine the levels and interrelationships of student and program variables. Although these schools participated voluntarily, they are typical of high schools in Colorado and reflected a variety of geographic regions, enrollment sizes, and urban, rural, and suburban settings. While the specific findings are most useful to the schools who participated, they will assist the CDE to develop a clearer understanding of the pertinent student outcomes and program indicators at the high school level, which can be monitored on an ongoing basis.

Further, the analysis of school results was conducted on a very small sample size, it should be viewed as exploratory, and the relationships which emerged (or did not emerge) should be cross-validated on a larger sample. Also, some of the school-level quality indicator variables were measured crudely and so did not appear to relate to student outcomes. More psychometric work should be carried out to improve measurements of some of these variables since they represent very important concepts in special education program delivery.

The special education students who participated in this study had higher absence and out-of-school suspension rates than did their non-handicapped peers. These differences were largely due to the higher absence and out-of-school suspension rates of students with emotional/behavioral problems. These special education students (with emotional/behavioral disabilities) were absent about twice as often as their non-handicapped peers, and they had the highest out-of-school suspension rate. In fact, they averaged about one-in-seven of their enrolled days absent, and one-in-four of them had received at least one out-of-school suspension. Further, the out-of-school suspension rates for students with perceptual/communicative handicaps and mentally retarded students were at least three times the rate of non-handicapped students.

Absenteeism and suspension can be seen as symptomatic of the difficulties some special education students face in pursuing their education. In particular, suspension is a fairly severe disciplinary action which is usually reserved for serious behavioral offenses. Data were not available in this study to examine the nature of the offense leading to suspension. This information would be necessary in order to shed some light on the reasons for these high suspension rates among special education students. It would also be worthwhile for future research to investigate whether factors such as school or district policies affect the use of suspension, or whether suspensions are differentially applied to handicapped and non-handicapped students. Finally, it is important to determine whether the disciplinary problems experienced by special education students, particularly those with behavioral disabilities, are related to their handicapping condition.

However, it is clear that both absenteeism and suspension result in missed opportunities to learn, which may translate into academic problems. The grade performance results indicated that, except for the mentally retarded, special education students who received grades were more likely to have received below satisfactory than above satisfactory grades in the four academic areas, and students with emotional/behavioral disorders received the lowest grades. Grades received in vocational education were higher than grades in academic subjects. Ninth grade handicapped students were particularly likely to receive lower grades.

While it is not clear if or how the grade performance of these handicapped students differed from that of non-handicapped students, it is interesting that grades for mentally retarded students were more likely to be above than below satisfactory. Student interview results indicated that mentally retarded students were more likely to take their courses in resource rooms than in regular education classrooms, suggesting the possibility that different grading standards were applied.

High absence and suspension rates and unsatisfactory grade performance do not in themselves tell whether there is any relationship between these types of problems. The relational analyses shed some light on this issue. As one might expect, it was found that special education students in the lowest grade performance categories, across all academic areas and vocational education, were also those with the highest absence rates and were more likely to have been suspended at least once.

Research indicates that students who experience academic and disciplinary problems are at high risk of further academic decline and alienation from school. It was of interest in this study to examine whether special education students who dropped out of school also experienced behavioral problems such as chronic absenteeism. The analysis of absence rates for students who dropped out, withdrew for "other" reasons, and did not withdraw indicated that dropping out was indeed associated with frequent absences. Dropouts averaged one-in-five of their enrolled days absent, which was twice as frequent as other special education students who did not withdraw.

This study did not find that special education students had higher dropout rates than non-handicapped students. It did, however, find a significant discrepancy between the two groups in the percentage of twelfth graders who received high school diplomas. While 92% of the regular education twelfth graders received diplomas, only 81% of the special education students with perceptual/communicative disabilities, and only half of those with emotional/behavioral problems or mental retardation received diplomas. Of course, it is known that some students who do not graduate return the next year. In this study, data were not available to determine whether these students returned the following year. Special education students are entitled to receive services until they reach a maximum age of 21. If they leave school at that age, they are more appropriate considered "age-outs" than dropouts. However, for those who do not return and who did not receive their diploma, their future prospects of self-sufficiency are limited. Additional research is needed about what actually happens to these students.

Again, the question is raised whether the problems experienced by special education students are related to their handicaps, to feelings of isolation or rejection, or to lack of interest or motivation. There is some evidence from the student surveys which addresses the psychological side of these issues. Although the special education students who were surveyed in this study reported being satisfied with their schooling, that their teachers held positive expectations for them, and that they were shown support from their teachers a lot of the time, the handicap groups differed among themselves on these measures. Students with

emotional/behavioral problems were the least satisfied and reported less frequently experiencing positive expectations and support from their teachers. Mentally retarded students reported the most favorable attitudes. Conversely, the mentally retarded reported less frequent participation in school-related activities and community activities, as well as less knowledge about skills related to independent living, than either of the other two handicap groups.

Relational analyses revealed that students' scores on the satisfaction, expectations, and support subscales of the student survey were related to their absence and suspension rates. More positive attitudes on these scales were associated with lower absence rates. Similarly, students who had not been suspended had higher composite scores on all three scales than did those who were suspended once or suspended twice or more.

In addition to describing selected characteristics of the handicapped students, the study examined indicators of the quality of special education programming in the participating schools. Both regular and special education staff provided ratings of the frequency with which practices and conditions indicative of effective special education programming were evident in their schools. The means of staff's composite scores on ten subscales of the survey indicated that the lowest rating was given in the area of staff development and the highest in the area of parent participation. Most of the means averaged around 3.00 on the scale, indicating that staff felt the effectiveness indicators were somewhat evident in their school settings.

On five of the ten subscales, regular and special education staff responded similarly. However, regarding resource availability and allocation, regular education staff had a more favorable view than did special education staff. On the other hand, special education staff ratings were more favorable on the subscales of assessment/placement, instructional practices, school climate, and student performance. In general, the differences between special education and regular education staff were small enough to suggest a fairly common view of their schools.

A final analysis was conducted to explore what relationships existed between the quality indicators and handicapped students' outcomes. This analysis had to be conducted at the school level using school means or proportions for both the staff indicator ratings and student outcomes. Although the sample size was small (N=14 schools), some interesting relationships were suggested. Absence rates bore no relationship to staff ratings of the quality indicators, whereas suspension and dropout rates were consistently negatively related to the ratings. Because of the small sample size, most of the coefficients did not reach statistical significance. But they indicated, perhaps not surprisingly, that schools whose staff provided higher ratings on the ten subscales of effectiveness indicators tended to be those with lower suspension and dropout rates. The relationships between graduation rates and the ratings were positive, and suggested that schools with higher percentages of twelfth grade special education students receiving diplomas were often those with higher staff ratings of parent participation, assessment/placement procedures, staff satisfaction, and staff characteristics.

Staff ratings did not relate to special education student grade performance in English/language arts, but they did highly correlate with mathematics grade performance of special education students. Higher staff ratings were associated with higher percentages of special education students receiving at least satisfactory grades in mathematics. The reason for the discrepancy between correlations for English/language arts and mathematics is not understood, but is a matter for further investigation.

Recommendations

What recommendations can be drawn from this study? The goal of the study, as part of Colorado's ongoing development of indicators of quality, was to determine whether such indicator data can be gathered and interpreted and whether it seems useful for improving special education quality at the school level. The results indicate that data representing the variables included in the study are collectable and do show the variations and relationships which allow a school to focus on improvement.

1. The similarity in results between special education teachers and regular education teachers suggest that a school may choose to combine their responses. The results from the student interviews closely matched the results from the student surveys, indicating validity of the survey responses. However, the interviews were able to probe more deeply and allowed the student to express feelings. The interview component should be available as another option, although most schools probably will find it too labor intensive to use.

2. Schools were positive about the value of the indicators analysis, but recommended substantial paring down of the volume and complexity of the data collection. There should be further analyses of items in addition to those already conducted for this study. Revision of the indicators package and process is recommended, along with the development of a user's guide. The schools also recommended incorporating indicators of graduates' success, although the difficulty of surveying students no longer in school was recognized.

3. A limited set of student outcome data were collected in this study. Student grades appear to be a useable but not totally satisfactory outcome measure, as indicated by the differences in results between mathematics and English grades, and by comments received from the schools. In addition, many student records did not provide useable grade results. Considerably more attention needs to be given to developing outcome indicators.

4. Many students, particularly EBD students, showed a constellation of symptoms of low satisfaction, low involvement, high absence, and low grades. These behaviors also are found in many regular education students, and are symptoms of alienation. There are climate development activities which could be undertaken by any school whose indicator measurements show a number of such students.

5. The variation in results by handicapping condition suggest that student outcome data should be broken down by condition. If a set of standards or comparison norms are to be developed for Colorado student indicators, they should be presented so that a school can take into account the differences among the makeup of their student population by handicapping condition.

6. Based on the results from their individual school profile, a number of schools suggested ways they could strengthen their own programs. Some of these recommendations were as follows:

   - Develop alternative strategies to out-of-school suspensions, such as an off-campus study hall or community service;

   - Improve collaboration between special education and regular education staff by making it a school priority, holding inservice on collaboration and recognizing collaborative efforts;

- Provide intensive training for staff working with students with severe emotional and physical problems;

- Develop a transition team approach to assist students in making the transition from middle level school to high school, including assistance to teachers in techniques for helping students increase attendance and achievement;

- Increase communication with parents by hiring a community liaison person to contact families both during critical situations as well as to maintain a positive contact about student achievement and growth.

5. DISSEMINATION AND USE OF STUDY FINDINGS

Dissemination and Use of Findings in Colorado

Each participating high school volunteered in order to obtain information which they could use in school improvement within their school. Significant effort was made to involve and ensure the commitment and interest of at least the special education director, the principal, and some key special education staff. For each school, descriptive results were compiled into a profile of findings including tables and narrative analysis totalling 40-50 pages for each school. This information was reported to each school in meetings held on-site during the spring, 1990.

One objective of the profile feedback session was to highlight perceived strengths and weaknesses in various program quality areas and some comparisons between regular education and special education.

A second objective was to obtain school reactions to the requirements of collecting such information compared to the expected usefulness of the information after it had been compiled. Discussions were held on ways to make the data collection process more efficient. Recommendations also were solicited on making specific revisions to the indicators.

Progress in the project and the indicators development has been reported regularly to the special education directors at their periodic meetings. A summary of the project report will be mailed to each director. The state Task Force for Special Education Quality Indicators will review the results and assist in redesigning the indicators based on the study results.

Among the most useful results of the data analysis will be that, after this immediate study is completed, the detailed item results will be used to review and simplify the instrument package for future school use. In addition, over the next few months, the participating schools will be studying their results and the total study results in terms of improvements in quality within their own schools.

Several immediate follow-ups are in the planning stages at this time. One is for pilot use at the elementary level. Also being considered are questions related to appropriate indicators of outcomes. The state task force and others will be addressing outcome issues this spring and next year.

A second expansion relates to the addition of instruments for use with parents and with high school special education graduates or those out of school. Such instruments are to be part of the future indicators package. It should be noted that currently the Colorado Department of Education is working on assessing graduates and parents of high school students through a specia project on transition from school to community.

Use at State and National Levels

The Colorado Department of Education will be using the results of this study and the revisions in the indicators forms and process to help develop a support system. Discussions have started as to the role of the department in providing technical assistance to schools and districts not only in the use of the indicators for self-study, but also in processing and feeding back profiles. It is not clear at this point if the resources at the SEA can be allocated to direct

help in data processing. Our experience with our effective schools indicators is that schools can process their own information and in so doing gain more ownership of the information. Possibilities of support at the level of the special education administrative unit, where a number of schools and school districts may be involved, remain to be considered.

Nationally, the primary outcomes to be disseminated will be findings of which indicators relate to what outcomes and the differences found among subgroups of staff and students. Colorado will have a set of instruments and procedures for a school's self-study which can be disseminated.

The availability of results for both Colorado and New Hampshire through the Center for Resource Management seems particularly useful for any other state thinking about developing a general set of indicators. For example, this general level of indicator data can be tied into a much more detailed set of outcomes and indicators already in development here or those in development in the Michigan project and elsewhere.

Colorado's goal is to develop several types of evaluative information, both to assist school improvement and be fully accountable at the local and state levels. Such information would include school self-studies, district information shared with the state, and data regularly collected by the state, perhaps beyond the limited kinds of information currently collected.

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Table E-2 – Grade Performance Distributions of High School Special Education Students Who Received Grades: Five Curricular Areas

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APPENDIX G Table G-1 – Grade Performance of High School Special Education Students Who Received Grades: Five Curricular Areas by Type of Handicapping Condition

APPENDIX H Table H-1 – Distributions of Frequency of Participation in Selected Activities of High School Special Education Students by Type of Handicapping Condition

APPENDIX I Table I-1 – Mean Absence Rates of High School Special Education Students in Three Grade Performance Categories, by Curricular Area

APPENDIX J Table J-1 – Grade Performance Distributions by Incidence of Suspension by Curricular Area

APPENDIX K Student Interview Summary

APPENDIX A

School and Program Overview

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT

A Project Facilitated by the Colorado Department of Education

SCHOOL AND PROGRAM OVERVIEW

The School and Program Overview is a summary overview report that is completed by the Special Education Administrator on pertinent school and program characteristics. These include: student enrollment, budget development, size of administrative instructional and service staff, population of students with handicaps, placement and program options, related services provided, grading policies, graduation policies, philosophy, special education policies and procedures, and interagency cooperation.

The numbers in parentheses for various items on this form reflect the numbering system of the Colorado Special Education Quality Indicators.

FOR OFFICE USE ONLY:

SEQ. No. _____

School Code _____

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT

A Project Facilitated by the Colorado Department of Education

SCHOOL AND PROGRAM OVERVIEW

_____

Name of School

Name and Position of Person(s) Filling Out This Form

Name	Position
_____	_____
_____	_____
_____	_____

Date Form Completed: _____

High School Characteristics and Resources

1. (1.1) a. Total Student Enrollment: _____

   b. Number of Students with Handicaps: _____

   c. Grade Levels Served by School: ___9th ___10th ___11th ___12th

2. (2.2) Percent of Students in School on Free and Reduced Lunch: _____

3. (2.5) School Staff: Indicate the total number of administrative, instructional, service, and support staff.

   a.___ School Administrator(s) excluding Special Education Administrator(s)

   b.___ Special Education Administrator(s)

   c.___ Related Services Staff (Speech and Language Therapists, Occupational Therapists, Physical Therapists, Hearing-Loss/Audiological Therapists, Psychologists, Counselors, Social Workers)

   d.___ Regular Education Teaching/ Instructional Staff

   e.___ Special Education Teaching/ Instructional Staff

   f.___ Support Personnel (Aides, Para-professionals)

4. Placement Options:

   Which of the following placement options does your school have for secondary special education students in the 1988-89 school year? (Please check all that apply)

   a.___ Regular education classrooms

   b.___ Part-time resource room for special education students

   c.___ Pull-out or itinerant services, such as speech therapy

   d.___ Self-contained classrooms

   e.___ Team taught (cooperative) classes

   f.___ Other placements (please describe)

   _____

5. (9.2) Special Education Population and Integration Into Regular Education Classrooms

Indicate the total number of handicapped students who fall into each of the following categories -- Please classify students by their primary handicap -- Do not put students in more than one category.

Also indicate the number of students in each category who have been integrated into regular education classrooms for the majority of the school day.

		Total #	Number in Regular Education
a.	Mentally Retarded	_____	____
b.	Emotional/Behavioral	_____	____
c.	Perceptual/Communicative (Learning disabled)	_____	____
d.	Hearing Handicapped	_____	____
e.	Visually Handicapped	_____	____
f.	Orthopedically or Physically Handicapped	_____	____
g.	Speech/Language Impaired	_____	____
h.	Multiple Handicapped	_____	____
i.	Other Impaired:		
	_____	_____	____

TOTAL _____

6. Program Options

For each of the programs, a-e below, please indicate which of the following statements best describes the types of secondary students who are provided with the particular program option at your school. Put only one number in the space before each program.

1 Provided routinely to both regular and special education students
2 Provided routinely only to special education students
3 Provided routinely only to students with certain disabilities
4 Provided only occasionally to special education students
5 Rarely or never provided to special education students

a. ____ Independent Living/Life Skills

b. ____ Vocational Assessment and Career Counseling

c. ____ Work Exploration/Work Experience

d. ____ Specific Job Skills Training

e. ____ Job Development and Placement Services

7. Related Services

For each of the following, please indicate whether your school makes these services available to its secondary special education students who need them. (For each item, please circle only one number)

		Yes	No	No Student Needs It
a)	Speech or language therapy	1	2	3
b)	Physical therapy	1	2	3
c)	Occupational therapy	1	2	3
d)	Audiological services	1	2	3
e)	Counseling or psychotherapy for disability-related problems	1	2	3
f)	Health services (e.g., physical exams or screening, catheterization, nursing services)	1	2	3
g)	Adaptive physical education	1	2	3
h)	Social work services	1	2	3
i)	Special transportation	1	2	3
j)	Tutors, readers, interpreters	1	2	3
k)	Assistive devices or physical adaptations (e.g., hearing aid, optical scanner, special desk, wheelchair, glasses)	1	2	3
l)	Other:_____	1	2	3

8. Support to Regular Education Teachers

Which of the following is available to regular education teachers when special education students are mainstreamed into their classes? (Please check all that apply)

a. _____ Consultation services by special education or other staff
b. _____ Special materials to use with the mainstreamed students
c. _____ In-service training on the needs of the mainstreamed students
d. _____ Classroom aides
e. _____ Smaller student load or class size
f. _____ Team teaching (cooperative teaching)
g. _____ None of the above

9. Grading Policies

9.1 Which of the following statements best describes your school's practice for grading secondary special education students who have been placed in regular education classes? (Please check one)

"Special education students in regular education classes are...."

a.___ Given grades that are based on the same standards as grades given regular education students

b.___ Given grades that are based on a different standard than regular education students

c.___ Not graded in these classes

d.___ Other (Please Describe) _____

9.2 Which of the following statements best describes your school's practice for grading secondary special education students attending special education classes? (Please check one)

"Special education students in special education classes are..."

a.___ Given grades that are based on the same standards as grades given regular education students

b.___ Given grades that are based on a different standard than regular education students

c.___ Not graded in these classes

d.___ Other (Please describe) _____

10. Graduation Policies

10.1 Which of the following statements best describes your school's practice for issuing regular diplomas to special education students? (Please check one)

"To receive a regular diploma..."

a.___ All or most special education students are required to meet the same criteria as regular education students

b.___ Only some special education students (such as those with certain disabilities) are required to meet the same criteria as regular education students

c.___ Special education students are not required to meet the same criteria as regular education students

10.2 Does your school give a special diploma or certificate to special education students who don't meet the same standards or criteria as regular education students?
____ Yes ____ No

10.3 In your school, do high school students have to pass a minimal competency test to obtain a regular diploma? ___ Yes ___ No

10.4 To obtain a regular diploma, are all, some, or none of your secondary-age special education students exempted from the minimal competency test?
____ All ___ Some ___ None

11. Philosophy, Staff Development, and Parent Resources

Please indicate whether the following is true for your school program.

	Yes	No
a. The school is supported by a written district philosophy of education that:		
(3.1) demonstrates the support of the School Board, district staff, and the community for the education of students with handicaps;	___	___
(3.2) is developed with professional and community involvement and receives public support;	___	___
(3.3) emphasizes high expectations and standards appropriate for all students, including students with handicaps.	___	___
b. (6.3) The special education unit develops and implements, with sufficient time and resources, a plan for ongoing staff development for all school staff to increase awareness toward the education of students with handicaps.	___	___
c. (6.4) The special education staff development program reflects current research on effective instructional practices.	___	___

	Yes	No
d. (6.8) The district evaluates the extent to which the staff development program meets staff needs and increases proficiency in providing effective special education programs.	___	___
e. (11.5) The school has developed/provided resources for parents such as a newsletter, workshops, etc.	___	___
f. (11.6) The school has a handbook for parents of special education students.	___	___

12. Policies and Procedures

The school district has established policies and procedures for special education that address:	Written Yes	Written No	Operational* Yes	Operational* No
a. Least Restrictive Environment:				
(3.4) movement toward independence/interdependence	___	___	___	___
(3.5) interaction among students with handicaps and non-handicapped students	___	___	___	___
(3.6) access to and participation in instructional and extra-curricular activities	___	___	___	___
b. Transition Plans:				
(3.7) pre-school to school	___	___	___	___
(3.8) class to class	___	___	___	___
(3.9) school to school	___	___	___	___
(3.10) school to community and world of work	___	___	___	___
c. Procedural Safeguards:				
(3.11) protection of rights	___	___	___	___
(3.12) parent participation/involvement	___	___	___	___
(3.13) identification, prereferral and referral	___	___	___	___
(3.14) evaluation and assessment	___	___	___	___
(3.15) IEP development and implementation	___	___	___	___

(* Operational means that the policy/procedure is implemented consistently on an ongoing basis.)

		Written		Operational*	
		Yes	No	Yes	No
d. Free Appropriate Education:					
(3.16)	quality and range of instructional and related services for children with handicapping conditions	___	___	___	___
(3.17)	other support service needs of the district's students with handicaps	___	___	___	___
(3.18)	transportation of students	___	___	___	___
(3.19)	access to extracurricular activities.	___	___	___	___
e. Staff Supervision and Evaluation:					
(6.7)	Staff supervision and evaluation designed to help all staff set and work toward professional growth goals relative to students with handicaps.	___	___	___	___

13. Budget Development

At the district level:		Yes	No
a. (4.4)	Money is budgeted to meet the rules and regulations on special education staff allocation	___	___
b. (4.5)	Resource development includes an investigation of state and federal monies as well as other funding sources, and incorporates the use of community resources, both fiscal and non-fiscal. Sources other than VIB, Chapter 1 and ECEA reimbursement are identified.	___	___
c. (4.6)	Budget development is based on a careful study of previous expenditures, changes in costs, projections of future enrollments, student and program needs and objectives, and includes input from staff and parents.	___	___

14. Interagency Cooperation

		Yes	No
a. (12.1)	There is a high level of cooperation and coordination with other community agencies through formal and informal interagency agreements, meetings, and ongoing correspondence.	___	___
b. (12.2)	Agency representatives are invited to participate in multi-disciplinary team meetings regarding students with handicaps.	___	___
c. (12.3)	Interagency transitional planning is in effect.	___	___

(* Operational means that the policy/procedure is implemented consistently on an ongoing basis.)

APPENDIX B

Student Outcome Data Collection Procedures

INSTRUCTIONS FOR THE HANDICAPPED STUDENT OUTCOME DATA COLLECTION FORM

This form should list all handicapped students enrolled during 1988-89.

1.) The list as provided is based on records provided CDE (copy enclosed). It may not be inclusive. If a student listed was never in your school, line out that name and data. If there were students enrolled who are not listed, please add their names and other information. If a student was in special education and has transferred out to regular education status, include that student.

2.) We have precoded the data we know about. If you see any errors, please make corrections.

3.) Primary handicap code - attached is a copy of the handicap codes as we understand they are used in your special education unit.

4.) Grade level - if grade levels are not used, then please record age, in years, as of April, 1989 and add a note that ages are being reported.

5.) Absences - we need the number of periods absent and the number of days enrolled. We will compute absence rate as # periods absent/# days enrolled x # periods in a day. If you record absences in other units, please provide those data and add a note explaining what you did. For length of time enrolled, either check the "whole year" space, or write in the number of days enrolled (your best estimate).

6.) Suspensions - we want the number of times (if any) suspensions occurred, not the number of days.

7.) Withdrawals - if the student was enrolled, but is not there at the end of the year, code as indicated (TR = transfer, DO = dropout, O = other). Graduates are considered there at the end of the year. A copy of definitions, used in CDE-2, are enclosed for your convenience. CDE-2 is an existing form collected from each school. We will be using the dropout count to establish a dropout rate.

8.) Graduates - if a student was graduated or received another completion certificate, check the appropriate space. Definitions used in CDE-2 are enclosed.

9.) Grade Performance - we are looking for letter grades in their most recent basic academic class in 1988-89 in the four listed academic subject areas plus PE and vocational.

a) If your grades include + and -, report those (e.g. C+)

b) If letter grades were not used, record whatever "grade" was used and enclose a description of your system.

c) Use the spring grade, if available, otherwise use the fall grade. If none this year, leave blank. Under science, do not include health.

d) If there is more than one class in an area, use the more basic academic class (the more mainline course).

e) For vocational education classes, include both classes in state approved vocational programs, and general job skills classes (pre-employment, employability, Coop G, etc.). Do not include career education or career awareness courses. If more than one vocational class was taken in the semester, list all with names and grades.

10.) If you have any questions, please call your CDE contact or any of us as follows:

Jim Hennes	866-6842
Richard Hulsart	866-6694
Jan Rose	866-6838

Glossary

Transfer: A student is considered a transfer to another district or educational program if the receiving school or program sends for the student's records, or if the sending district can document that the parent or legal guardian has provided information regarding the school or educational program into which the student is transferring.

Dropout: A "dropout" is defined as a person who leaves school for any reason, except death, before completion of a high school diploma or its equivalent and who does not transfer to another public or private school or enroll in an approved home study program.

High School Graduate: A graduate is defined as a student who completes local-board defined requirements for graduation.

Other High School Completer: Other completer is defined as a student who receives a certificate or other designation of high school completion, attendance or training.

COLORADO DEPARTMENT OF EDUCATION

COLORADO SPECIAL EDUCATION OUTCOME INDICATORS PROJECT

Handicapped Student Outcome Data Collection Form - 1988-89

School _____ Page _____ of _____

Student Name or #	Gender	Primary Handicap Code	Setting (a)	Grade Level (b)	ABSENCE # Periods Absent for Year	LENGTH OF TIME ENROLLED Whole Year (Check)	or # of Days	SUSPENSION # Incidents IN-SCH.	OUT-OF SCH.	WITHDRAWALS If student not in sch. at end of year, indicate: (c) TR. DO. O.	GRADUATE Check if student grad. or completed h.s. prog. GRAD. COMP.	FOR CDE USE SURVEY Check if student compl. survey	INTERVIEW Check if student was interviewed
1.													
2.													
3.													
4.													
5.													
6.													
7.													
8.													
9.													
10.													
11.													
12.													
13.													
14.													
15.													
TOTALS: NUMBER OF STUDENTS →													

(a) Setting Code: M = mainstreamed in regular classroom more than 50% of the day. S = In special classrooms and resource rooms more than half-a-day

(b) If no grade level assigned, report age as of April 1989 and so indicate.

(c) Withdrawal code: TR = Transferred out to another program; DO = Dropped out; O=Other withdrawals, serious illness, death

GRADE PERFORMANCE

Year 1988-89

	English/ Language Arts/Reading	Math	Science	Social Studies	Phys. Ed.	Voc. Ed.	Comments as Needed
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							

COLORADO DEPARTMENT OF EDUCATION
COLORADO SPECIAL EDUCATION OUTCOME INDICATORS PROJECT

Aggregated Student Record Data - 1988-89

School _____

Person(s) Completing This Form

_____ Tel._____

_____ Tel._____

The Student Outcomes Data Collection Form (attached) is for providing information on each handicapped student attending the school in 1988-89. It collects demographic information (gender, handicap, setting {mainstreaming} and grade level) as well as information on attendance (absence), suspensions, dropping out and graduation.

Equivalent information is needed for regular education students. We will compute dropout and graduation rates from the information you report on Form CDE-2, due July 10. Please provide suspension and attendance data for regular education students on the items below.

1. Suspensions - 1988-89 (regular education students)

	In-School Suspension	Out-of-School Suspension
Number of occurrences or incidences		
Number of students		

2. Absence Data - 1988-89 (regular education)

a. Number of days in your school year _____days

b. Number of periods in school day _____periods

c. Total number of periods absent for year for all regular education students _____

d. Cumulative number of days all regular education students were enrolled (Estimate of the number of days each student was enrolled summed over all regular education students) _____

NOTE: If your records do not reasonably allow computation of c and d, then please call Jim Hennes, CDE, 303/866-6842 and we'll see if an alternate procedure can be worked out.

APPENDIX C

Student Activity and Satisfaction Survey

Instructions for Survey Administration

Student Interview

Student Interview Protocol

Guide to Summarizing the Student Interview

Preliminary Validation Procedures

Matrix showing the interrelationships between survey items and interview questions

Seq. No. _____

School Code: _____

_____

_____
School Name

Survey # _____

Grade: ___ 11th ___ 12th ___ Ungraded

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT

STUDENT ACTIVITY

AND SATISFACTION SURVEY

The purpose of this survey is to find out how you feel about what happens in your school. There are also questions about what you do and how you feel about your life.

Your answers will remain confidential -- they won't be shared with teachers or administrators in your school.

This survey was adapted from instrumentation developed for the New Hampshire Special Education Program Improvement Partnership by the Center for Resource Management, Inc.

HOW OFTEN ARE THE FOLLOWING THINGS TRUE?

4	-	All of the time	1	-	Almost never
3	-	A lot of the time	DK	-	Don't know
2	-	Not very often			

1.	I like my classes.	4	3	2	1	DK
2.	Teachers give me the help I need.	4	3	2	1	DK
3.	I feel good about my grades.	4	3	2	1	DK
4.	I get along well with other students in this school.	4	3	2	1	DK
5.	I get along well with my teachers.	4	3	2	1	DK
6.	Teachers treat me fairly.	4	3	2	1	DK
7.	In this school, I've been able to take the classes/courses I wanted to take.	4	3	2	1	DK
8.	Students in my classes follow classroom rules-there isn't a lot of fooling around.	4	3	2	1	DK
9.	I feel OK about asking questions in my classes if I don't understand something.	4	3	2	1	DK
10.	If I need extra help with my work, teachers give it to me.	4	3	2	1	DK
11.	My teachers expect me to complete my school work.	4	3	2	1	DK
12.	I feel safe in this school.	4	3	2	1	DK
13.	I feel good about the way I'm treated by other students in my classes.	4	3	2	1	DK
14.	My teachers expect me to work hard in class--I can't just sit around.	4	3	2	1	DK
15.	My teachers have made me feel that being successful in school is very important.	4	3	2	1	DK
16.	My teachers show that they care about me.	4	3	2	1	DK
17.	My teachers give me a lot of encouragement when I do well.	4	3	2	1	DK
18.	My teachers have helped me believe I can be successful.	4	3	2	1	DK

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19.	My experiences in this school have made me feel good about myself.	4	3	2	1	DK
20.	I enjoy going to school.	4	3	2	1	DK

SINCE YOU HAVE BEEN IN THIS SCHOOL, HAVE YOU EVER

		YES	NO
21.	Participated in a school sport?	____	____
22.	Joined a school music group?	____	____
23.	Joined a school club?	____	____
24.	Gone to a school game or sporting event?	____	____
25.	Gone to the school library?	____	____
26.	Gone to see a school play?	____	____
27.	Gone to see a school concert?	____	____
28.	Gone to a school dance?	____	____

OUT OF SCHOOL, HAVE YOU EVER

		YES	NO
29.	Gone grocery shopping on your own?	____	____
30.	Gone clothes shopping on your own?	____	____
31.	Been to a bank?	____	____
32.	Gone to the town library?	____	____
33.	Visited a museum?	____	____
34.	Gone to a ball game?	____	____
35.	Gone camping?	____	____
36.	Had a paid part-time job?	____	____
37.	Gone on a trip outside of the state?	____	____
38.	Gone on a trip outside of the United States?	____	____

HOW OFTEN, IF EVER, DO YOU DO THE FOLLOWING (Mark one for each line)

		At Least Once a Week	At Least Once a Month	At Least Once a Year	Never
39.	Go grocery shopping?	____	____	____	____
40.	Go shopping for clothes?	____	____	____	____
41.	Go to a movie?	____	____	____	____
42.	Go to a sporting event?	____	____	____	____
43.	Go to a restaurant?	____	____	____	____
44.	Visit with friends at a local gathering place?	____	____	____	____
45.	Visit your friend's houses?	____	____	____	____
46.	Talk with friends on the telephone?	____	____	____	____
47.	Go to a party?	____	____	____	____
48.	Attend church/synagogue?	____	____	____	____
49.	Go on vacation/take trips?	____	____	____	____

WHAT KINDS OF THINGS DO YOU KNOW A LOT ABOUT, AND WHAT ARE THE KINDS OF THINGS WHERE YOU NEED TO KNOW MORE?

CHECK ONLY ONE

		Know a Lot	Need to Know More
50.	How to find out about different jobs?	____	____
51.	How to apply for a job?	____	____
52.	How to act in a job interview?	____	____
53.	How to continue your education or get into a training program after high school?	____	____
54.	What kinds of laws protect your rights?	____	____
55.	How to take a trip out of town?	____	____
56.	How to get a license to drive?	____	____
57.	How to read newspaper advertisements?	____	____

		CHECK ONLY ONE	
		Know a Lot	Need To Know More
58.	How to get a checking account in a bank?	____	____
59.	How you can find social or recreational activities to participate in?	____	____
60.	How to shop for groceries?	____	____
61.	How to get around in the town where you live?	____	____
62.	How to shop for your own clothes?	____	____
63.	How to write a fill out a job application?	____	____
64.	How to contact community agencies for service you might need?	____	____
65.	How to use a telephone book?	____	____
66.	About your rights when you have a job?	____	____
67.	About your responsibilities when you have a job?	____	____
68.	How to live independently on your own?	____	____
69.	What to do if there is an emergency at home?	____	____
70.	What to do if you are lost?	____	____
71.	How to behave in order to keep a job?	____	____

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT

A Project Facilitated by the Colorado Department of Education

STUDENT ACTIVITY AND SATISFACTION SURVEY

ADMINISTERING THE STUDENT SURVEY

1. Whether the survey is being given on a group basis or one-to-one, always explain the purpose of the survey and that it is being used for a study to improve the school. Emphasize that it is not a test -- you will not be graded. Your teachers will not see your survey answers. It will remain confidential, we do not ask your name. A survey number is given to each survey for data entry on a computer.

2. Indicate that student responses are valued as much as comments by school staff.

3. Carefully review each section of the survey and the type of scale used. You may want to write the choices on a blackboard if available. Also indicate the "Don't Know" option.

   a) Items 1-18 -- circle one of the numbers in the 1-4 scale to show how often the items are True for you;

   b) Items 21-38 -- check Yes or No;

   c) Items 39 - 49 -- check one of the columns to show How Often you do certain things;

   d) Items 50-71 -- check whether you Know a Lot about certain things or whether you Need to Know More.

4. If the survey is not being read to the students, indicate that if it is difficult to read or understand an item, they should ask for help.

RECORDING INFORMATION ABOUT STUDENT RESPONDENTS

To reduce the burden of identifying each student survey response by school, the name of the high school has already been inserted on each survey. To emphasize confidentiality, students are not asked to write their names on the survey. However, we need to know the grade level, handicapping condition, and gender of each student. This will allow a determination of differences in the perceptions and experiences of students with different handicapping conditions as well as a determination of differences in the perceptions and experiences of male and female students with handicaps. Please do the following in order to track responses by grade level, disability, and gender.

Before distributing each survey:

1) At the top of the page where "Survey #" is indicated, use the following codes to enter a survey number corresponding to the handicapping condition and gender of the student who will complete the survey.

1 = Female 2 = Male

Handicap Codes:

01 Mentally Retarded
02 Emotional/Behavioral
03 Perceptual/Communicative
04 Hearing Handicapped
05 Visually Handicapped
06 Physically Handicapped
07 Speech/Language
08 Multiple Handicapped
09 Other Health Impaired

Examples:

Survey #1-01 = Female, Mentally Retarded
Survey #2-04 = Male, Hearing Handicapped
Survey #1-05 = Female, Visually Handicapped

2) Also check the grade level of the student completing the survey.

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT

STUDENT INTERVIEW

School:_____

Grade Level: 11th____ 12th____ Ungraded____

Gender: Male____ Female____

Primary Handicapping Condition: (Check Only One)

Handicap Codes:

_____ 01 Mentally Retarded

_____ 02 Emotionally/Behavioral

_____ 03 Perceptual/Communicative

_____ 04 Hearing Handicapped

_____ 05 Visually Handicapped

_____ 06 Orthopedically or Physically Handicapped

_____ 07 Speech/Language

_____ 08 Multiple-Handicapped

_____ 09 Other Health Impaired

1a. I'm going to name five subject areas. Tell me which subjects you take in regular classes and which in the resource room, or whether you don't take the subject at all.

1b. Which of these are your favorite classes?

1c. Which are your least favorite?

1d. In which classes are you getting grades that are 70 or above (C or above)?

1e. In which classes are you getting grades that are below 70 (below C)?

(Record student responses to 1a - 1e by putting an "X" in the appropriate columns below.)

	Reg. Class	Resource Room	Don't Take	Most Fav.	Least Fav.	Grades 70+	Grades Under 70
English/Language Arts	____	____	____	____	____	____	____
Math	____	____	____	____	____	____	____
Social Studies	____	____	____	____	____	____	____
Science	____	____	____	____	____	____	____
Vocational Ed.	____	____	____	____	____	____	____

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

2a. Tell me what you like about your most favorite classes -- what makes them good?

2b. What is it that you don't like about your least favorite classes?

2a. Most Favorite Features

No response (don't know) _____ or list features described by student.

2b. Least Favorite Features

No response _____ or list features described by student.

3a. What helps you get passing grades?

3b. What happens in classes that results in your getting failing grades?

3a. Factors Leading to Passing Grades

No response _____ or list factors.

3b. Factors Leading to Failing Grades

No response _____ or list factors.

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Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

4. Do you take: physical education _____ music classes _____ art classes _____?

5a. What do you like about these classes?

5b. What do you dislike about them?

Include verbatim quotes as much as possible or indicate no response/don't know.

5a. Reasons for Liking

No response _____ or list reasons.

5b. Reasons for Disliking

No response _____ or list reasons.

6a. Were there any classes or subjects you wanted to take that weren't available in this school? Yes ____ No _____

6b. (If yes), What are they?

7a. Were there any classes or subjects provided by the school that you wanted to take but weren't able to? Yes ____ No ____

7b. (If yes) what are they? (record student responses)

7c. Why weren't you able to take them? (Record reasons given by student)

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

8a. On the whole, are you satisfied with how you get along with other students in this school? Yes ____ No ____

8b. Why do you feel this way? (Record reasons given by student)

9. Have there ever been times when you've felt left out or treated differently by other students? (if yes--) tell me what made you feel this way.

Yes ____ No ____

Record reasons or experiences described by students who answer "Yes."

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

10a. What do you consider to be the best experience you ever had in this school?

10b. What do you consider to be the worst experience you ever had in this school?

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

For students who are in regular classrooms for part of the school day

11a. On the whole, tell me whether you think your regular class teachers expect you to work hard to get good grades or whether they're kind of easy with you.

Work Hard _____ Easy _____ Mixed Response _____ (e.g., some do and some don't) Don't Know _____

11b. Why do you feel this way? (Record reasons given by student)

12a. On the whole, do you feel as if your regular class teachers care about whether you succeed?

Yes _____ No _____ Mixed Response _____ Don't Know _____

12b. Why do you feel this way? (Record reasons given by student)

For students who are in resource rooms for part of the school day

13a. On the whole, tell me whether you think your resource room teachers expect you to work hard to get good grades or whether they're kind of easy with you?

Work Hard _____ Easy _____ Mixed Response _____ Don't Know _____

13b. Why do you feel this way? (Record reasons given by student)

14a. On the whole, do you feel as if your resource room teachers care about whether you succeed?

Yes _____ No _____ Mixed Response _____ Don't Know _____

14b. Why do you feel this way? (Record reasons given by student)

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

15a. What kind of help do you get from regular classroom teachers?

No Help _____ or record descriptions of help described by student.

16a. What kind of help do you get from your resource room teachers?

No Help _____ or record descriptions of help described by student

15b. Is it what you need or could you use more help?

What is needed ____ Could use more ___

15c. What other help would you like to get?

16b. Is it what you need or could you use more help?

What is needed ____ Could use more ___

16c. What other help would you like to get?

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

17a. Since you have been in this school, have you worked with any of the following types of people? (Read list to student and check those with whom student has worked.)

17b. (If yes) was it helpful to you?

		Yes: Helpful
(1)	Speech or language therapist	
(2)	Physical therapist	
(3)	Occupational therapist	
(4)	Hearing-loss therapist	
(5)	Social worker	
(6)	Psychologist	

17c. How was it helpful? or why wasn't it helpful? (Record reasons given by student for specific type of assistance)

17d. Was there anything that bothered you about working with these people?

Yes ___ No ___

17e. (If yes) what was it that bothered you? (Record response given by student for specific type of individual)

Grade Level: 11th:___ 12th:___ Disability Code:___ Gender:___

18a. Have you ever worked with a counselor in this school? Yes ___ No ___

18b. (If yes) was it helpful to you? Yes ___ No ___

18c. How was it helpful? or why wasn't it helpful? (Record reasons given by student)

18d. Was there anything that bothered you about working with a counselor?

Yes ___ No ___

18e. (If yes) what was it that bothered you? (Record response of student)

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

19a. Tell me about the kinds of activities you take part in at school, for example scho... clubs, music groups, sports, going to games or a dance.

No participation _____ or record activities cited by student.

____ Participated in a school sport

____ Joined school music group

____ Joined a school club

____ Other: _____

____ Went to school game or sporting event

____ Went to school concert

____ Went to a school play

19b. Are there any school activities you would like to take part in, but haven't?
Yes ___ No ___

If yes, what are they? (Record activities cited by student)

19c. What has kept you from participating in these activities?

Don't Know _____ or record reasons cited by student.

19d. Tell me about any kinds of hobbies or special interests you have outside of school.

No hobbies/special interests _____ or record those cited by student.

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

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20. What kinds of plans do you have for what you'll do after high school? For example, what kinds of jobs have you thought about? What kinds of thoughts have you had for continuing your education? for a place to live?

No job plans _____ No education plan _____ No plans re: place to live _____
or record plans cited by student below.

Job Plans	Education Plans	Place to Live

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

21a. Do you feel ready for a job? Yes ___ No ___ Don't Know ___

21b. What have you learned in school to help you get a job?

21c. What kinds of jobs have you learned about as possible careers for you in the future when you are out of school?

22a. Have you ever had any discussion in your classes about your rights?

Yes ____ No ____ Don't Know ____

22b. What kinds of things did you learn?

22c. Do you think you can stand up for your rights? Yes ___ No ___

22d. Give me some examples of why you feel this way.

Grade Level: 11th:____ 12th:____ Disability Code:____ Gender:____

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT

INSTRUCTIONS

STUDENT INTERVIEW

1. Confirm the interview schedule with the special education staff member who is serving as the contact person for the study at the high school.

   a. Make sure that the students scheduled for interviews match the student interview sample selected for the study.

   b. Make sure that the student has been scheduled for at least 45 minutes and that a private room is available for the interview.

2. For each student interviewed, complete all of the information on the cover sheet of the interview, as well as on the bottom of each interview page.

3. Before starting the interview, take a few minutes to put the student at ease -- explain that the interview is being conducted for a study to improve the school program. Emphasize that their answers are confidential and won't be shared with teachers and administrators in the school.

4. Follow the interview protocol to record each student's responses.

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT

STUDENT INTERVIEW

After Completing the Interview

1. Make sure that the information you recorded on the protocol is legible and can be easily read by a person who will word process the data--sentences should be clear and complete. If necessary, redo sections of the protocol where your notes are legible only to yourself.

2. Make sure that the interview protocol is complete -- every item has some indication of the student's response, even is it is "no response".

3. In addition to submitting each of the completed student interview protocols for data analysis across the participating high schools, you will complete a write-up which summarizes the student interview data for the particular high school. Use the attached guide for summarizing the student interviews.

THE COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT

GUIDE TO SUMMARIZING THE STUDENT INTERVIEWS FOR EACH HIGH SCHOOL

The Interview Setting

Briefly describe the high school site -- location and type of school, where the interviews were conducted, and the number and type of students (gender and disability) interviewed. Indicate any special circumstances about the interviews that should be noted.

General Guidelines: In summarizing student responses to the various questions, there are some general guidelines that should be followed. These include:

- Look for similarities and differences in responses across the student -- similarities become general themes, and it is useful to provide illustrative quotes to the extent possible.

- If there are differences in how students respond, comment on whether these differences tend to reflect the student's primary setting (regular classroom or resource room), type of disability, or gender, i.e. do male vs. female students respond differently? So students with different types of disabilities respond differently?

Student Satisfaction -- Program/Classes, and Grades

1a. Indicate the number of students interviewed who were in regular classrooms or resource room classes for the various subject areas.

1b. Indicate the types of classes students cited as their favorite classes, including whether there were similarities or differences in the students'responses, i.e., "most of the students cited English as a favorite class" or "the students varied in the kinds of classes they liked the most".

2a. Summarize what the students liked about their favorite classes. Indicate themes and provide illustrative quotes if possible.

1c. Similar to 1b. above, indicate the types of classes students cited as their least favorite, indicating similarities and differences in responses.

2b. Summarize what students didn't like about these classes, highlighting themes and providing illustrative quotes if possible.

1d. Indicate the types of classes in which students indicate they are getting passing grades, indicating the number or percent of students citing particular types of classes..

3a. Summarize what helps the students to get good grades, highlighting themes and providing illustrative quotes.

1e. Indicate the types of classes in which students indicate they are getting failing grades, indicating the number of students citing particular types of classes.

3b. Summarize why students feel they get failing grades, highlighting themes and providing illustrative quotes.

4. Indicate the number of students taking physical education, music, and/or art classes.

5a. If they take such classes, summarize comments made by the students about why they like these classes.

5b. Summarize comments about why they don't like these classes.

6a. Indicate the number of students indicating that there were classes they wanted to take that weren't available in the school.
6b. Indicate what these classes/subjects were.

7a. Indicate the number of students who indicated that they weren't able to take classes/subjects that are offered in the school.
7b. Indicate what these classes/subjects were.
7c. Summarize student's perceptions of why they couldn't take these classes, highlighting themes.

Student Satisfaction -- Relationships With Other Students

8a. Indicate the number of the students interviewed who feel satisfied with how they get along with other students in the school.
8b. Summarize reasons for satisfaction or dissatisfaction, commenting upon themes and providing illustrative quotes.

9. Indicate the number of students who feel there were times when they were left out or treated differently by other students.
Summarize the examples given, and provide illustrative quotes if possible.

10a. Summarize the "best experiences" described by the interviewed students and provide illustrative quotes.

10b. Summarize the "worst experiences described by the interviewed students and provide illustrative.

Teacher Expectations

For students who are in regular classrooms for part of the day:

11a. Indicate the number who feel that their regular classroom teachers expect them to work hard.

11b. Summarize reasons given by the students which illustrate why the students feel regular classroom teachers expect them to work hard for their grades.

12a Indicate the number of students who feel that their regular classroom teachers care about whether they succeed?

12b. Summarize reasons given by the students which illustrate why the students feel regular classroom teachers care if they succeed.

For students who are in resource room classrooms for part of the day:

13a. Indicate the number who feel that their resource room teachers expect them to work hard.

13b. Summarize reasons given by the students which illustrate why the students feel resource room teachers expect them to work hard for their grades.

14a. Indicate the number of students who feel that their resource room teachers care about whether they succeed?
14b. Summarize reasons given by the students which illustrate why the students feel resource room teachers care if they succeed.

Teacher Support: Reinforcement and Relations With Teachers

For students who are in regular classrooms for part of the school day:

15a. Summarize the kinds of help students indicate they get from regular classroom teachers, highlighting themes and providing illustrative examples if possible.

15b. Summarize student comments about whether it is the kind of help they need or whether they need more help.

15c. Describe other types of help students say they need from regular classroom teachers.

For students who are in resource rooms for part of the school day:

16a. Summarize the kinds of help students indicate they get from resource room teachers, highlighting themes and providing illustrative examples if possible.

16b. Summarize student comments about whether it is the kind of help they need or whether they need more help.

16c. Describe other types of help students say they need form resource room teachers.

For Students in Either Setting

17a. Indicate the number of students who worked with each type of related services staff.

17b. Indicate the types of service support that the interviewed students found helpful.

17c. Summarize comments made by the students about why the service support was or wasn't helpful to them, highlighting themes and providing illustrative quotes if possible.

17d. Summarize comments made by the students regarding whether there
17e. was anything about working with any of the related services staff that "bothered" them, and provide illustrative examples.

18a. Indicate the number of students who indicated they had worked with a counselor.

18b. For those students who did work with a counselor, indicate the number who found it helpful.

18c. Summarize comments made by the students about why counselor assistance was either helpful or not helpful to them.

18d. Summarize comments made by the students regarding whether there
18e. was anything about working with a counselor in the school that "bothered" them and provide illustrative examples.

School and Community Activity

19a. Indicate the number of interviewed students who participate in school activities and the kinds of activities.

19b. Indicate the number of students who indicate that there are school activities they would like to participate in but haven't, and the kinds of activities.

19c. Summarize comments made by the students about what has kept them from participating in the activities.

19d. Indicate the number of students who have hobbies or special interests outside of school and what they are.

Independent Living

20. Indicate the number of interviewed students who indicated they had plans for what they will do after high school. Describe the specific plans students had regarding a job, continuing their education, and finding a place to live.

21a. Indicate the number of students who feel they are ready for a job.

21b. Summarize comments students made about what they have learned in school to help them get a job.

21c. Describe the kinds of jobs students feel they know about.

22a. Indicate the number of students who have had class discussions about their rights.

22b. Summarize the comments made by the students about what they have learned about their rights.

22c. Indicate the number of students who feel they can stand up for their rights.

22d. Summarize examples given by the students regarding their ability to stand up for their rights.

STUDENT INTERVIEW - FOR SECONDARY STUDENTS

Satisfaction: school, program/classes, grades, and relationships with other students

1a. Tell me which subjects you take in regular classes and which in the resource room: English/language arts, math, social studies, science, vocational education.

1b. Which of these are your favorite classes?

1c. Which ones are your least favorite?

1d. In which classes are you getting grades that are 70 or above (C or above)?

1e. In which classes are you getting grades that are below 70 (below C)?

2a. Tell me what you like about your most favorite classes -- what makes them good?

2b. What is it that you don't like about your least favorite classes?

3a. What helps you get passing grades?

3b. What happens in classes that results in your getting failing grades?

4. Do you take: a) physical education; b) music classes; c) art classes?

5a. What do you like about these classes?

5b. What do you dislike about them?

6a. Were there any classes or subjects you wanted to take that weren't available in this school?

6b. (If yes), What are they?

7a. Were there any classes or subjects offered in this school that you wanted to take and weren't able to?

7b. (If yes), What are they?

7c. Why weren't you able to take them?

8a. On the whole, are you satisfied with how you get along with other students in this school?

8b. Why do you feel this way?

9. Have there ever been times when you've felt left out or treated differently by other students? (If yes, tell me what made you feel this way.)

10a. What do you consider to be the best experience you ever had in school?

10b. What do you consider to be the worst experience you ever had in school?

Teacher Expectations

11a. On the whole, tell me about whether you think your regular classroom teachers expect you to work hard to get good grades, or whether they're kind of easy with you?

11b. Why do you feel this way?

12a. Do you feel as if your regular class teachers care about whether you succeed?

12b. Why do you feel this way?

13a. On the whole, tell me whether you think your resource teachers expect you to work hard to get good grades or whether they're kind of easy with you?

13b. Why do you feel this way?

14a. On the whole, do you feel as if your resource room teachers care about whether you succeed?

14b. Why do you feel this way?

Teacher Support: Reinforcement and Relations with Teachers

15a. What kind of help do you get from regular classroom teachers?

15b. Is it what you need or could you use more help?

15c. What other help would you like to get?

16a. What kind of help do you get from your resource room teacher?

16b. Is it what you need or could you use more help?

16c. What other help would you like to get?

17a. Since you have been in this school, have you worked with any of the following types of people:

1)___Speech or language therapist

2)___Physical therapist

3)___Occupational therapist

4)___Hearing-loss therapist

5)___Social worker

6)___Psychologist

17b. (If yes), Was it helpful to you?

17c. How was it helpful? or Why wasn't it helpful?

17d. Was there anything that bothered you about working with these people?

17e. Why do you feel this way?

18a. Have you ever worked with a counselor in this school?

18b. (If yes), Was it helpful to you?

18c. How was it helpful? or Why wasn't it helpful?

18d. Was there anything that bothered you about working with a counselor?

18e. (If yes), Why do you feel this way?

School and Community Activity

19a. Tell me about the kinds of activities you take part in at school, for example school clubs, sports, going to games or dances.

19b. Are there any school activities you would like to take part in, but haven't?

19c. What has kept you from participating in these activities?

19d. Tell me about any kinds of hobbies or special interests you have outside of school.

Independent Living

20. What kind of plans do you have for what you'll do after high school. For example--what plans do you have for a job? For continuing your education? For a place to live?

21a. Do you feel ready for a job?

21b. What have you learned in school to help you get a job?

21c. What kinds of jobs do you know about?

22a. Have you ever had any discussion in your classes about your rights?

22b. What kinds of things did you learn?

22c. Do you think you can stand up for your rights?

22d. Give me some examples of why you feel this way.

STUDENT ACTIVITY AND SATISFACTION SURVEY AND STUDENT INTERVIEW

The Student Activity and Satisfaction Survey and Student Interview instruments will be used in combination to address study questions related to student satisfaction and the school and community experiences of 11th and 12th grade students with handicaps.

Study Questions Addressed:

How satisfied are secondary students with handicaps with: school program (subjects/classes), grades, and relationships with other students?

What types of expectations do secondary students with handicaps experience?

What types of reinforcement and support do secondary students with handicaps experience?

How active are secondary students with handicaps in the school and community?

Do secondary students with handicaps feel they have the basic knowledge/skills associated with living independently in the community?

Student and Interview Survey Sample:

All 11th and 12th grade students with handicaps in the study high schools who are able to complete a survey (with and/or without assistance) will complete the survey instrument. A sub sample of 11th and 12th graders from the survey sample will be selected for face to face interviews. The sample will be a stratified to ensure representation by disability and gender to the extent possible.

Validity -- Initial Development

The Student Satisfaction and Activity Survey and the Student Interview are very close adaptations of instruments developed by the Center for Resource Management (CRM - the study subcontractor) for the New Hampshire Special Education Effectiveness Study. In developing these instruments for New Hampshire, the following approaches were used to ensure the content or face validity of survey and interview items:

1) A review of existing instrumentation was conducted to generate an initial pool of items that had been used in previous studies to examine areas of inquiry that are similar to our study questions;

2) Four CRM staff members who have been extensively involved in both special education and effective schools research independently selected from the larger pool of items those they felt most closely matched the study questions;

3) Items were then selected which at least 3 of the 4 staff members had felt were valid measures of the study questions to be addressed, and the survey instrument was constructed;

4) Five high school teachers were asked to react to the survey items for both clarity and validity and minor refinements were made based on their recommendations;

5) Interview questions were constructed that were related to the study questions and the survey items. The interview items either expanded upon the survey items and/or explored relevant areas not examined through the survey items.

6) Based on comments from Decision Resources Corporation (DRC), items related to broad self-concept measures were eliminated from the survey and the student interview was shortened and modified to improve the focus and structure of items.

Finally, a matrix was constructed as a validation check of the inter-relationships of items across the survey and interview instruments with respect to specific study questions and areas of inquiry.

Colorado Adaptations -- The Student Survey

In adapting the student survey instrument for Colorado, the following procedures were used:

1) The survey instrument was reviewed by staff of the Colorado Department of Education's Planning and Evaluation Unit and Special Education Units and representatives of the Colorado Task Force for Special Education Quality Indicators to determine their its relevance to the Colorado federal/evaluation study and the Colorado Special Education Quality Indicators. The items were also reviewed for clarity and their appropriateness for secondary students with handicaps in Colorado.

2) Individuals reviewing the survey instrument felt it was highly applicable to the Colorado effort. Based on their recommendations, some additional items were added related to independent living and job preparation skills and minor changes were made in the wording of some items related to students' experience in the school and community.

3) Based on feedback from the actual use of the survey with over 250 students in New Hampshire, a change was made in the response categories related to students' perceptions of their knowledge and skills--from "yes" or "no" to "know a lot about" or "need to know more."

Colorado Adaptations -- The Student Interview

1) A similar review process occurred for the interview instrument, and it was determined to be highly applicable. Based on recommendations, items were added related to the following:

- Whether there were classes or subjects students wanted to take that weren't available in the school and what they were.

- Whether there were any classes or subjects offered by the school that the student wanted to take but wasn't able to; what these classes/subjects were and why the student felt he/she wasn't able to take them.

- Whether students felt that their resource room teachers cared about their succeeding in school.

- Whether students felt that they had earned their grades in resource room classes or had gotten grades just for showing up.

- Whether students had worked with: speech or language therapists, physical therapists, occupational therapists, hearing-loss therapists, social workers, psychologists, and/or school counselors.
  Whether the students had found the assistance helpful and whether there was anything about receiving the assistance that bothered the students.

A validation matrix for the Colorado study has been constructed and is attached. This matrix shows the interrelationships of items across the survey and interview items with respect to the Colorado study.

Reliability

Reliability refers to the likelihood that a measurement procedure will yield the same description of a given phenomenon if that measurement is repeated either with the same sample at different points in time, or when asked of different respondents concerning the same case. It would be highly intrusive and objectionable to school sites to use test-retest reliability approaches with secondary handicapped student samples. However, there are a number of techniques that can be used to ensure that reliable measurements are obtained. First, respondents should only be asked to answer questions which they are likely to understand and have a response. Also, to ensure that respondents are not encouraged to provide unreliable responses, "don't know" is an acceptable response for all questions and we have allowed for this.

The use of the survey with over 250 11th and 12th grade students with handicaps in New Hampshire and the use of the interview with a subsample of over 50 students indicated that the students were able to both understand and respond to the items in these instruments. Both of the instruments incorporated the option of "don't know" responses.

Another method for coping with the problem of reliability is to ask several questions aimed at tapping a particular variable. In all cases, we have used several items in the survey and interview instruments to assess a variable.

Finally, it should be noted that our procedures include steps to ensure that all students completing the survey understand the instructions and the items:

1) Survey items have been written at a 5th grade reading level and most of the 11th and 12th grade students in the sample will have no problem with reading the items. The use of the survey with 11th and 12th grade students with handicaps in New Hampshire, indicated the students completed the survey with no difficulty in 15-20 minutes.

2) The survey will be read to those students who are not able to read the survey because of their level of reading skills, or who, because of their disability, would have difficulty completing the survey without this assistance -- for example, the survey will be read to blind students and their oral responses, to the items will be noted on the survey. Interpreters will be used as needed with deaf students.

3) People administering the survey will carefully review the survey with the students and be available to respond to questions as needed.

Validity Matrix

Relationship of Study Questions to Items in Student Satisfaction and Activity Survey and Student Interview

STUDY QUESTIONS	SURVEY ITEMS	INTERVIEW ITEMS
How satisfied are secondary students with handicaps with: grades; relationships with other students; safety in school; and, school programs (i.e., subjects/classes).	Satisfaction: School, program/classes, grades, relationships with other students 1. I like my classes. 3. I feel good about my grades. 4. I get along well with other students in this school. 7. I've been able to take the classes/courses I wanted to take. 9. I feel ok about asking questions in my classes if I don't understand something. 12. I feel safe in this school. 13. I feel good about the way I'm treated by other students in my classes. 20. I enjoy going to school.	Satisfaction: school, program/classes, grades, and relationships with other students 1a. Tell me which subjects you take in regular classes and which in the resource room: English/language arts, math, social studies, science, vocational education. 1b. Which of these are your favorite classes? 1c. Which are your least favorite classes? 1d. In which classes are you getting grades that are 70 or above (C or above)? 1e. In which classes are you getting grades that are below 70 (below C)? 2a. Tell me what you like about your favorite classes -- what makes them good? 2b. What is it that you don't like about your least favorite classes? 3a. What helps you get passing grades? 3b. What happens in classes that results in your getting failing grades? 4. Do you take: physical education; music classes; art classes? 5a. What do you like about these classes? 5b. What do you dislike about them? 6a. Were there any classes or subject you wanted to take that weren't available in this school? 6b. If yes, what are they?

STUDY QUESTIONS	SURVEY ITEMS	INTERVIEW ITEMS
How satisfied are secondary students with handicaps with: grades; relationships with other students; safety in school; and, school programs (i.e., subjects/classes).	<u>Satisfaction: School, program/classes, grades, relationships with other students</u> 1. I like my classes. 3. I feel good about my grades. 4. I get along well with other students in this school. 7. I've been able to take the classes/courses I wanted to take. 9. I feel ok about asking questions in my classes if I don't understand something. 12. I feel safe in this school. 13. I feel good about the way I'm treated by other students in my classes. 20. I enjoy going to school.	<u>Satisfaction: school, program/classes, grades, and relationships with other students</u> (Continued) 7a. Were there any classes or subjects offered in this school that you wanted to take and weren't able to? 7b. If yes, what are they? 7c. Why weren't you able to take them? 8a. On the whole, are you satisfied with how you get along with other students in this school? 8b. Why do you feel this way? 9. Have there ever been times when you've felt left out or treated differently by other students? (If yes, tell me what made you feel this way.) 10a. What do you consider to be the best experience you ever had in school? 10b. What do you consider to be the worst experience you ever had in school?

STUDY QUESTIONS	SURVEY ITEMS	INTERVIEW ITEMS
What types of expectations do secondary handicapped students experience?	Teacher Expectations 8. Students in my classes follow classroom rules - there isn't a lot of fooling around. 11. My teachers expect me to complete my school work. 14. My teachers expect me to work hard in class - I can't just sit around. 15. My teachers have made me feel that being successful in school is very important. 18. My teachers have helped me believe I can be successful. 19. My experiences in this school have made me feel good about myself.	Teachers Expectations For Students in Regular Classrooms: 11a. Tell me whether you think your regular classroom teachers expect you to work hard to get good grades or whether they're kind of easy with you? 11b. Why do you feel this way? 12a. Do you feel as if your regular class teachers care about whether you succeed? 12b. Why do you feel this way? For Students in Resource Rooms: 13a. Tell me whether you think your resource teachers expect you to work hard to get good grades or whether they're kind of easy with you? 13b. Why do you feel this way? 14a. Do you feel as if your resource room teachers care about whether you succeed? 14b. Why do you feel this way?

STUDY QUESTIONS	SURVEY ITEMS	INTERVIEW ITEMS
What types of teacher reinforcement and support do secondary handicapped students in regular education placements and in special settings experience?	Teacher Support: Reinforcement and Relations with Teachers 2. Teachers give me the help I need. 5. I get along well with my teachers. 6. Teachers treat me fairly. 10. If I need extra help with my work, teachers give it to me. 16. My teachers show that they care about me. 17. My teachers give me a lot of encouragement.	Teacher Support: Reinforcement and Relations with Teachers 15a. What kind of help do you get from regular classroom teachers? 15b. Is it what you need or could you use more help? 15c. What other help would you like to get? 16a. What kind of help do you get from your resource room teacher? 16b. Is it what you need or could you use more help? 16c. What other help would you like to get? 17a. Since you have been in this school, have you worked with any of the following types of people: speech/language therapist, physical therapist, occupational therapist, hearing-loss therapist, social worker, psychologist. 17b. Was it helpful to you? 17c. How was it helpful or why wasn't it helpful? 17d. Was there anything that bothered you about working with these people? 17e. Why do you feel this way? 18a. Have you ever worked with a counselor in this school? 18b. Was it helpful to you? 18c. How was it helpful or why wasn't it helpful? 18d. Was there anything that bothered you about working with a counselor? 18e. Why do you feel this way?

STUDY QUESTIONS	SURVEY ITEMS	INTERVIEW ITEMS
How active are secondary students with disabilities in the school and community?	School and Community Activity a) Frequency of Yes or No responses for following activity questions: 21. Participated in a school sport? 22. Joined a school music group? 23. Joined a school club? 24. Gone to a school sporting event. 25. Gone to the school library? 26. Gone to see a school play? 27. Gone to see a school concert? 28. Gone to a school dance? 29. Gone grocery shopping on your own? 30. Gone clothes shopping on your own? 31. Been to a bank? 32. Gone to a town library? 33. Visited a museum? 34. Gone to a ball game? 35. Gone camping? 36. Had a paid part-time job? 37. Gone on a trip outside of the state? 38. Gone on a trip outside of the United States? b) Frequency of Response, re: at least once a week, at least once a month, at least once a year for the following activity questions: 39. Go grocery shopping? 40. Go shopping for clothes? 41. Go to a movie? 42. Go to a sporting event? 43. Go to a restaurant? 44. Visits with friends at a local gathering place? 45. Visit your friend's houses? 46. Talk with friends on the telephone? 47. Go to a party? 48. Attend church/synagogue? 49. Go on vacation/take trips?	School and Community Activity 19a. Tell me about the kinds of activities you take part in at school, for example school clubs, sports, going to games or dances. 19b. Are there any school activities you would like to take part in, but haven't? 19c. What has kept you from participating in these activities? 19d. Tell me about any kinds of hobbies or special interests you have outside of school.

STUDY QUESTIONS	SURVEY ITEMS	INTERVIEW ITEMS
Do secondary students with disabilities feel they have basic knowledge/skills associated with living independently in the community?	Independent Living/Job Preparation Frequency of "Know a lot" or "Need to know more" responses for following knowledge/skills: 50. How to find out about different kinds of jobs? 51. How to apply for a job? 52. How to act in a job interview? 53. How to continue your education or get into a training program after high school? 54. What kinds of laws that protect your rights? 55. How to take a trip out of town? 56. How to get a license to drive? 57. How to read newspaper advertisements to find a job? 58. How to get a checking account in a bank? 59. How you can find social or recreational activities to participate in? 60. How to shop for groceries? 61. How to get around in the town where you live? 62. How to shop for your own clothes? 63. How to fill out a job application? 64. How to contact community agencies for service you might need? 65. How to use a telephone book? 66. About employee/student rights? 67. About employee/student responsibilities? 68. How to live independently on your own? 69. What to do if there is an emergency at home? 70. What to do if you are lost? 71. How to behave in order to keep a job?	Independent Living 20. What kind of plans do you have for what you'll do after high school. For example--what plans do you have for a job? For continuing your education? For a place to live? 21a. Do you feel ready for a job? 21b. What have you learned in school to help you get a job? 21c. What kinds of jobs do you know about? 22a. Have you ever had any discussion in your classes about your rights? 22b. What kinds of things did you learn? 22c. Do you think you can stand up for your rights? 22d. Give me some examples of why you feel this way.

APPENDIX D

Special Education Services Staff Survey

Regular Education Staff Survey

Procedures for Distributing/Administering Surveys

Preliminary Validation Procedures

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT

A Project Facilitated by the Colorado Department of Education

SPECIAL EDUCATION SERVICES STAFF SURVEY

This survey instrument was developed from the Colorado Special Education Quality Indicators. The instrument was developed for Colorado by the Center for Resource Management, Inc., South Hampton, NH, based on forms used in the New Hampshire Special Education Program Improvement Partnership.

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INSTRUCTIONS FOR COMPLETING THE STAFF SURVEY

This survey is designed to acquire staff perceptions of many aspects of your school's functioning, with an emphasis on special education services. Please respond to the survey in terms of the conditions, approaches, and practices that characterize special education in this school. If you are assigned to work in several buildings, respond from the perspective of this particular school as best you can.

1. The item numbering system is based on the items in the Colorado Education Quality Indicators document. Items from the Colorado Indicators that are not in this Staff Survey are included instead in other data collection instruments.

2. Respond to each item with your opinion about the extent to which it is evident in the school building program. For example, circle "4" if the item describes something that happens "almost always"; "3" if "sometimes"; "2" if "seldom"; and "1" if the item describes something that happens "almost never".

3. If you don't know if the item represents a condition or practice that characterizes the school building or district program, circle "DK". "DK" responses do not distort the results because they are not figured into the averages -- they are not counted as a zero.

4. If you have a subjective opinion about some of the items but feel you do not really know for sure, it is acceptable to circle the number that represents your best sense of how things are.

5. Your responses will remain confidential. Only total staff responses will be reported.

6. Please indicate on the last page how long it took you to complete the survey.

Name of School:_____ FOR OFFICE USE ONLY:

Date: _____ SEQ. NO. _____

SCHOOL CODE _____

Please check your appropriate role category:

____ 1. Teacher/instructional staff

____ 2. Administrator

____ 3. Related Services (Speech/Language Therapist, Physical Therapist, Occupational Therapist, Hearing-Loss/Audiological Therapist, Counselor, Psychologist, Social Worker, Nurse)

RESOURCE ALLOCATION

Please use the following ratings to express your opinion about the special education program in your school.

4 - Almost always
3 - Sometimes
2 - Seldom
1 - Almost never
DK - Don't Know

		Please Circle				
4.3	Sufficient funds and resources are allocated to implement an effective program for students with handicaps in such areas as:					
	4.3.1 staffing	4	3	2	1	DK
	4.3.2 facilities	4	3	2	1	DK
	4.3.3 equipment	4	3	2	1	DK
	4.3.4 services	4	3	2	1	DK
	4.3.5 instructional materials	4	3	2	1	DK
4.6.1	Special education budget development includes input from staff.	4	3	2	1	DK
4.6.2	Special education budget development includes input from parents.	4	3	2	1	DK
4.7.1	There are sufficient numbers of appropriately certified special education teaching/instructional staff to implement an effective program for students with handicaps.	4	3	2	1	DK
4.7.2	There are sufficient numbers of appropriately certified special education administrative staff to implement an effective program for students with handicaps.	4	3	2	1	DK
4.7.3*	There are sufficient numbers of appropriately certified or endorsed related services personnel* to implement an effective program for students with handicaps.	4	3	2	1	DK
4.7.4	There are sufficient numbers of support personnel (para-professionals, aides, clerks) to assist special education staff in implementing an effective program for students with handicaps.	4	3	2	1	DK

* Related services personnel = speech/language therapists, physical therapists, occupational therapists, hearing-loss/audiological therapists, counselors, psychologists, social workers, and nurses.

4.7.5	There are sufficient numbers of support personnel (para-professionals, aides, clerks) to assist regular education staff in implementing an effective program for students with handicaps.	4	3	2	1	DK
4.7.6	Staff assignments are based on staff qualifications to address the needs and characteristics of the students with handicaps being served.	4	3	2	1	DK
4.8	Students with handicaps and their families have access to appropriate and integrated related services.	4	3	2	1	DK
4.9	Instructional staff participate in the selection of appropriate instructional materials, equipment, supplies and other resources for students with handicaps.	4	3	2	1	DK
4.12	Adequate and appropriate space and accommodations are available for use by related services personnel.	4	3	2	1	DK
4.13	Special classrooms are located within the regular school setting and not in isolated sections.	4	3	2	1	DK
4.14	School facilities are adapted for the students and provide the least restrictive environment. Students with handicaps have physical access to all programs in the school placement.	4	3	2	1	DK

STAFF CHARACTERISTICS

5.3.1	Teachers serving students with handicaps are appropriately certified, licensed, or otherwise approved.	4	3	2	1	DK
5.3.3	Related service personnel serving students with handicaps are appropriately certified, licensed, or otherwise approved.	4	3	2	1	DK
5.3.5	Teachers practice only in areas of special/regular education at age levels and in programs for which they are prepared through training and experience.	4	3	2	1	DK
5.3.7	Related services personnel practice only in areas of special/regular education at age levels and in programs for which they are prepared through training and experience.	4	3	2	1	DK

5.4	The staff who provide services to students with handicaps are skilled and well trained.	4	3	2	1	DK
5.5.1	Teachers have high but realistic achievement expectations for students with handicaps.	4	3	2	1	DK
5.5.2	Administrators have high but realistic achievement expectations for students with handicaps.	4	3	2	1	DK
5.5.3	Support staff have high but realistic achievement expectations for students with handicaps.	4	3	2	1	DK
5.6	Special education staff demonstrate familiarity with state laws and regulations regarding special education and student records.	4	3	2	1	DK
5.7.1	Regular education staff in this school are willing to work with students with handicaps.	4	3	2	1	DK
5.7.2	Regular education staff in this school willingly work with special education staff on effective instruction for students with handicaps in regular classrooms.	4	3	2	1	DK
5.7.3	Special education staff support regular education staff in their efforts.	4	3	2	1	DK

Regular education, special education, and related service staff:

5.8	understand the roles of others and respond to each other's needs;	4	3	2	1	DK
5.9	see themselves as part of a team and work as a team in planning and implementing IEP's;	4	3	2	1	DK
5.10	communicate and plan together to ensure service coordination and student progress;	4	3	2	1	DK
5.11	work together to increase the opportunities for integrating students with handicaps into regular school programs.	4	3	2	1	DK

STAFF DEVELOPMENT

6.2.1	The staff development needs of all school staff are assessed regularly.	4	3	2	1	DK
6.2.2	In-service programs are planned in response to the assessed needs, interests, and strengths of school staff.	4	3	2	1	DK

6.2.3	The training needs of parents of students with handicaps are assessed regularly.	4	3	2	1	DK
6.2.4	Training programs for parents are planned in response to their assessed needs, interests, and strengths.	4	3	2	1	DK
6.2.5	The training needs of volunteers who work with students with handicaps are assessed regularly.	4	3	2	1	DK
6.2.6	Training programs for volunteers are planned in response to their assessed needs and strengths.	4	3	2	1	DK
6.5	District and building administrators explicitly support special education staff development efforts and provide staff with incentives.	4	3	2	1	DK
6.6	Para-professionals and assistants receive training on the nature and management of students with handicaps.	4	3	2	1	DK

LEADERSHIP

7.3.1	Superintendents at the district level (district superintendent and assistant superintendent) agree on the importance of services for students with handicaps and show support for all staff serving students with handicaps.	4	3	2	1	DK
7.3.2	The principal(s) in this building agree on the importance of services for students with handicaps and show support for all staff serving students with handicaps.	4	3	2	1	DK

Instructional leaders in the school:

7.4	portray the importance of learning and emphasize the value of achievement for all students;	4	3	2	1	DK
7.5.1	set clear standards for quality curriculum and instruction;	4	3	2	1	DK
7.5.2	evaluate appropriate personnel by clear quality standards;	4	3	2	1	DK
7.6	know and can apply teaching and learning principles and model effective teaching practices for staff as appropriate;	4	3	2	1	DK

7.7.1	establish systems of incentives and rewards for excellence in student performance;	4	3	2	1	DK
7.7.2	establish systems of incentives and rewards for excellence in teacher performance;	4	3	2	1	DK
7.8	expect instructional programs to improve over time - improvement strategies are organized and systematic and are given high priority and visibility;	4	3	2	1	DK
7.9	create a climate of shared decision-making involving students, teachers, principals, parents and school boards in developing regular and special education policies, procedures, and plans;	4	3	2	1	DK
7.10	are skillful in resolving and managing conflict and reacting positively to suggestions and criticisms;	4	3	2	1	DK
7.11	emphasize the improvement of instruction and student performance through on-going staff supervision, observation, and consultation;	4	3	2	1	DK
7.12	clearly communicate special education philosophy, priorities, and expectations to staff, parents, students, and the community.	4	3	2	1	DK

In addition, Special Education Administrators:

7.13	develop and maintain a knowledge base of regular education assessment, curriculum, and instruction and anticipate their potential impact on special education;	4	3	2	1	DK
7.14	provide appropriate guidelines, consultation and coordinative support to facilitate the IEP process;	4	3	2	1	DK
7.15.1	develop a budget sufficient to carry out effective special education services appropriately;	4	3	2	1	DK
7.15.2	obtain additional funds to support innovative programming;	4	3	2	1	DK
7.16	allocate budgeted funds so that adequate personnel, facilities, materials, and supplies are available to support effective special education services;	4	3	2	1	DK

7.17	make assignments which enable special education personnel to engage in ongoing communication and consultation with regular education teachers responsible for teaching students with handicaps;	4	3	2	1	DK
7.18	manage the assessment and analysis of special education and related service needs of district students;	4	3	2	1	DK
7.19	evaluate the overall effectiveness of special education service delivery, and student outcomes, and adjust services accordingly.	4	3	2	1	DK

ASSESSMENT, DETERMINATION OF SERVICES, AND PLACEMENT

Pre-assessment procedures

8.1	Systematic practices are used for screening, identification, pre-referral procedures (alternative approaches used prior to special education referral) and referral procedures.	4	3	2	1	DK
8.2	Explanations are given to parents regarding their rights.	4	3	2	1	DK

Assessment procedures include:

8.3	age-language-culture-appropriate measures;	4	3	2	1	DK
8.4	a variety of formal and informal methods in varied settings including school, home, and community;	4	3	2	1	DK
8.5	holistic assessment of the whole child including psychological, educational, social/ emotional, physical, and communicative; and,	4	3	2	1	DK
8.6	multi-disciplinary and multi-faceted assessments in the different functioning areas.	4	3	2	1	DK

Determination of services:

8.7	IEPs are planned together by parents, special and regular education service providers, other staff, agency personnel, and students if appropriate.	4	3	2	1	DK
8.8.1	Educational services (regular education, special education, and vocational education) are planned and developed cooperatively by parents and district professionals during the staff IEP process.	4	3	2	1	DK

8.8.2	Provisions exist for staff participation in the on-going review, evaluation, and revision of services.	4	3	2	1	DK
8.9	There are clear relationships among learning goals and objectives, instructional activities, and the assessment of student outcomes.	4	3	2	1	DK
8.10	Handicapped student participation in regular education is facilitated by provisions for adapting and modifying instruction and materials to meet the needs of students functioning at all levels.	4	3	2	1	DK
8.11	Services to children with handicaps include addressing developmental/compensatory needs and functional life skills as well as academics.	4	3	2	1	DK

Placement procedures

8.12	Students with handicaps are placed in the regular education environment whenever possible.	4	3	2	1	DK
8.13	A variety of placements, instructional programs and related services options are available to implement each student's IEP, either within the district or through contractual or other co-operative arrangements with other agencies.	4	3	2	1	DK
8.14	Placement and assignment of students to classes and teachers reflect an assessment of each student's needs and each teacher's skills.	4	3	2	1	DK

INSTRUCTIONAL PRACTICES

IEP implementation

9.4	The amount of time and the extent to which each student with a handicap is integrated with non-handicapped peers corresponds with IEP specifications.	4	3	2	1	DK
9.5	Special education service providers use the IEP as a guide for daily lesson plans and instructions for students with handicaps. Curricula are adapted for individual students by varying instructional methods, materials, pace and assignment.	4	3	2	1	DK
9.6	The implementation of IEPs (service delivery) is coordinated. Persons from outside agencies are involved in IEP implementation as specified by the multi-disciplinary team.	4	3	2	1	DK

9.7.1	Annual IEP reviews involve all appropriate personnel.	4	3	2	1	DK
9.7.2	Annual IEP reviews involve parents.	4	3	2	1	DK
9.8	When appropriate individuals are unable to attend the IEP review, there is an opportunity for them to review the results.	4	3	2	1	DK
9.9	The progress of students with handicaps is evaluated against the IEP and not against the standard curriculum.	4	3	2	1	DK
9.10	Each student receives appropriate related services such as occupational therapy, physical therapy, speech therapy, and/or orientation and mobility training.	4	3	2	1	DK

Instructional practices in the school/community serving students with handicaps

9.11.1	Class sizes and caseloads allow special education staff to meet the individual needs of students with handicaps.	4	3	2	1	DK
9.11.2	Class sizes allow regular education staff to meet the individual needs of students with handicaps.	4	3	2	1	DK
9.12.1	Special education service providers continually diagnose academic needs and prescribe appropriate educational activities for each student.	4	3	2	1	DK
9.12.2	Diagnosis and prescription take student developmental levels, learning styles, and rates of learning into account.	4	3	2	1	DK
9.13.1	Special education teachers use a variety of alternative instructional approaches.	4	3	2	1	DK
9.13.2	Regular education teachers use a variety of alternative instructional approaches.	4	3	2	1	DK
9.14.1	Special education teachers use a variety of instructional grouping patterns, ranging from whole class to one-on-one instruction.	4	3	2	1	DK
9.14.2	Regular education teachers use a variety of instructional grouping patterns, ranging from whole class to one-on-one instruction.	4	3	2	1	DK

9.15.1	Special education teachers use effective instructional practices supported by research.	4	3	2	1	DK
9.15.2	Regular education teachers use effective instructional practices supported by research.	4	3	2	1	DK
9.16	Effective use of time is emphasized in the school's instructional settings to maximize opportunities to learn.	4	3	2	1	DK
9.17	Students with handicaps come to class prepared with their materials.	4	3	2	1	DK
9.18.1	In special education classes, learning activities absorb most of the school day--teachers gain and maintain students' attention and monitor students' time actively engaged in learning.	4	3	2	1	DK
9.18.2	In regular education classes, learning activities absorb most of the school day--teachers gain and maintain students' attention and monitor students' time actively engaged in learning.	4	3	2	1	DK
9.19.1	Student progress and achievement are monitored systematically on an ongoing basis.	4	3	2	1	DK
9.19.2	Student monitoring uses a variety of both formal and informal methods, including test results, grade reports, attendance records, functional behavioral analysis, observation, and other methods to identify potential problems.	4	3	2	1	DK
9.20.1	Special education teachers use evaluations for formative purposes; i.e., instructional diagnosis, prompt feedback to students and parents, and modification of instructional design.	4	3	2	1	DK
9.20.2	Regular education teachers use evaluations for formative purposes; i.e., instructional diagnosis, prompt feedback to students and parents, and modification of instructional design.	4	3	2	1	DK
9.21	Students with handicaps have access to and are encouraged to participate in all academic, vocational, intramural and extracurricular programs and activities on an equal basis with non-handicapped students.	4	3	2	1	DK
9.22	Students with handicaps are given opportunities to go into the community for functional learning when appropriate.	4	3	2	1	DK

9.23	Materials, activities, and equipment used are adaptive and appropriate to the age, skills, and developmental levels of students.	4	3	2	1	DK
9.24	Regular education teachers share in the responsibility for students with handicaps and adjust regular education services as needed.	4	3	2	1	DK

SCHOOL CLIMATE AND ORGANIZATION OF INSTRUCTION SETTING

Rules for acceptable behavior of staff, students, parents, and administrators within the school are:

10.1	cooperatively developed;	4	3	2	1	DK
10.2	reviewed and reinforced through collaborative efforts of school staff, parents and students; and,	4	3	2	1	DK
10.3	clearly communicated to students and parents through handbooks, written communication, open houses and conferences.	4	3	2	1	DK
10.4	The school is clean and in good repair.	4	3	2	1	DK
10.5.1	Special education students feel an integral part of the school.	4	3	2	1	DK
10.5.2	Special education staff feel an integral part of the school.	4	3	2	1	DK
10.6	School planning reflects the characteristics of the school population and the community.	4	3	2	1	DK
10.7.1	Special education teachers use a variety of techniques to manage behavior successfully.	4	3	2	1	DK
10.7.2	Regular education teachers use a variety of techniques to manage behavior successfully.	4	3	2	1	DK
10.8.1	In special education classrooms, physical space and instructional materials are organized to facilitate learning.	4	3	2	1	DK
10.8.2	In regular education classrooms, physical space and instructional materials are organized to facilitate learning.	4	3	2	1	DK

10.9.1	Special education teachers relate to students in a caring way both in and out of the classroom.	4	3	2	1	DK
10.9.2	Regular education teachers relate to students in a caring way both in and out of the classroom.	4	3	2	1	DK
10.10	The school program facilitates positive interaction among all students and encourages students without handicaps to accept and understand the abilities, needs, and feelings of their peers with handicaps.	4	3	2	1	DK
10.11	When students with handicaps demonstrate challenging behaviors, a supplementary behavioral plan is developed as part of the IEP.	4	3	2	1	DK

PARENT PARTICIPATION

11.7	There is effective two-way communication and collaboration with parents.	4	3	2	1	DK
11.8	Parents are participants in the staffing - IEP process.	4	3	2	1	DK
11.9	Parents are assisted and encouraged to participate in the implementation of their children's IEPs by supplementing school instruction with supportive home activities.	4	3	2	1	DK
11.10	Parents are participants in planning and supporting the individualized transition program (ITP) process.	4	3	2	1	DK
11.11	Student progress and results of IEP reviews are discussed with and are adequately communicated to parents.	4	3	2	1	DK
11.12	Parents are encouraged to visit the classroom/ learning environment.	4	3	2	1	DK
11.13	Parents are informed of available support groups.	4	3	2	1	DK
11.14	A variety of information and training options are available for parents of children with handicaps.	4	3	2	1	DK

STUDENT PERFORMANCE

For the items below, please use the following rating scale to express your opinion about the extent to which the following outcomes are achieved by the school's population of students with handicaps.

4 - Almost all of the students
3 - Some of the students
2 - Very few students
1 - None of the students
DK - Don't Know

13.12	Commensurate with their abilities, students with handicaps develop competencies in suitable academic areas.	4	3	2	1	DK
13.13	Students with handicaps exhibit positive self-concepts.	4	3	2	1	DK
13.14	Commensurate with their abilities students with handicaps develop the skills necessary for employment.	4	3	2	1	DK
13.15	Students with handicaps develop satisfactory interpersonal skills.	4	3	2	1	DK
13.16	Commensurate with their abilities students with handicaps develop self-help and independent living skills.	4	3	2	1	DK
13.17	Students achieve IEP goals and objectives related to future (long term) expectations.	4	3	2	1	DK

SATISFACTION

For the next section of this survey, please use the following rating scale to express your level of satisfaction with the following areas.

4 - Very Satisfied
3 - Somewhat Satisfied
2 - Somewhat Dissatisfied
1 - Very Dissatisfied
DK - Don't Know

15.9.1	I am satisfied with the overall quality of special education services provided for students with handicaps in this school.	4	3	2	1	DK
15.9.2	I am satisfied with the quality of instructional services provided for students with handicaps in regular education classrooms in this school.	4	3	2	1	DK

15.9.3	I am satisfied with the adequacy of related services provided to students with handicaps in this school.	4	3	2	1	DK
15.9.4	I am satisfied that the school program enables students with handicaps to perform and progress to the best of their ability.	4	3	2	1	DK
15.9.5	I am satisfied that the school effectively integrates students with handicaps into regular education classes.	4	3	2	1	DK
15.9.6	I am satisfied that the school effectively facilitates positive relationships between students with handicaps and their non-handicapped peers.	4	3	2	1	DK
15.9.7	I am satisfied that in this school students with handicaps are treated well by their non-handicapped peers.	4	3	2	1	DK

Please indicate your perception of student satisfaction and parent satisfaction with the overall quality of special education services.

15.2	Students with handicaps are satisfied with the overall quality of their special education services.	4	3	2	1	DK
15.3	Parents of students with handicaps are satisfied with the overall quality of their childs' special education services.	4	3	2	1	DK

TIME TO COMPLETE SURVEY: _____ (in minutes)

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REGULAR EDUCATION STAFF SURVEY

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This survey is designed to acquire staff perceptions of many aspects of your school's functioning, with an emphasis on special education services. Please respond to the survey in terms of the conditions, approaches, and practices that characterize special education in this school. If you are assigned to work in several buildings, respond from the perspective of this particular school as best you can.

1. The item numbering system is based on the items in the Colorado Education Quality Indicators document. Items from the Colorado Indicators that are not in this Staff Survey are included instead in other data collection instruments.

2. Respond to each item with your opinion about the extent to which it is evident in the school building program. For example, circle "4" if the item describes something that happens "almost always"; "3" if "sometimes"; "2" if "seldom"; and "1" if the item describes something that happens "almost never".

3. If you don't know if the item represents a condition or practice that characterizes the school building or district program, circle "DK". "DK" responses do not distort the results because they are not figured into the averages -- they are not counted as a zero.

4. If you have a subjective opinion about some of the items but feel you do not really know for sure, it is acceptable to circle the number that represents your best sense of how things are.

5. Your responses will remain confidential. Only total staff responses will be reported.

6. Please indicate on the last page how long it took you to complete the survey.

Name of School:_____ FOR OFFICE USE ONLY:

Date:_____ SEQ. NO. _____

SCHOOL CODE _____

Please check your appropriate role category:

____ 1. Teacher/instructional staff

____ 2. Administrator

____ 3. Other

RESOURCE ALLOCATION

Please use the following ratings to express your opinion about the special education program in your school.

4 - Almost always
3 - Sometimes
2 - Seldom
1 - Almost Never
DK - Don't Know

		Please Circle				
4.3	Sufficient funds and resources are allocated to implement an effective program for students with handicaps in such areas as:					
	4.3.1 staffing	4	3	2	1	DK
	4.3.2 facilities	4	3	2	1	DK
	4.3.3 equipment	4	3	2	1	DK
	4.3.4 services	4	3	2	1	DK
	4.3.5 instructional materials	4	3	2	1	DK
4.7.1	There are sufficient numbers of appropriately certified special education teaching/ instructional staff to implement an effective program for students with handicaps.	4	3	2	1	DK
4.7.2.	There are sufficient numbers of appropriately certified special education administrative staff to implement an effective program for students with handicaps.	4	3	2	1	DK
4.7.3	There are sufficient numbers of appropriately certified or endorsed related services personnel* to implement an effective program for students with handicaps.	4	3	2	1	DK
4.7.4	There are enough support personnel (para-professionals, aides, clerks) to assist special education staff in implementing an effective program for students with handicaps.	4	3	2	1	DK
4.7.5	There are enough support personnel (para-professionals, aides, clerks) to assist regular education staff in implementing an effective program for students with handicaps.	4	3	2	1	DK

* Related services personnel = speech/language therapists, physical therapists, occupational therapists, hearing-loss/audiological therapists, counselors, psychologists, social workers, and nurses.

4.7.6	Staff assignments are based on staff qualifications to address the needs and characteristics of the students with handicaps being served.	4	3	2	1	DK
4.9	Instructional staff participate in the selection of appropriate instructional materials, equipment, supplies and other resources for students with handicaps.	4	3	2	1	DK

STAFF CHARACTERISTICS

5.4	The staff who provide services to students with handicaps are skilled and well trained.	4	3	2	1	DK
5.5.1	Teachers have high but realistic achievement expectations for students with handicaps.	4	3	2	1	DK
5.5.2	Administrators have high but realistic achievement expectations for students with handicaps.	4	3	2	1	DK
5.5.3	Support staff have high but realistic achievement expectations for students with handicaps.	4	3	2	1	DK
5.6	Special education staff demonstrate familiarity with state laws and regulations regarding special education and student records.	4	3	2	1	DK
5.7.1	Regular education staff in this school are willing to work with students with handicaps.	4	3	2	1	DK
5.7.2	Regular education staff in this school willingly work with special education staff on effective instruction for students with handicaps in regular classrooms.	4	3	2	1	DK
5.7.3	Special education staff support regular education staff in their efforts.	4	3	2	1	DK

Regular education, special education, and related service staff:

5.8	understand the roles of others and respond to each other's needs;	4	3	2	1	DK
5.9	see themselves as part of a team and work as a team in planning and implementing IEP's;	4	3	2	1	DK
5.10	communicate and plan together to ensure service coordination and student progress;	4	3	2	1	DK
5.11	work together to increase the opportunities for integrating students with handicaps into regular school programs.	4	3	2	1	DK

STAFF DEVELOPMENT

6.2.1	The staff development needs of all school staff are assessed regularly.	4	3	2	1	DK
6.2.2	In-service programs are planned in response to the assessed needs, interests, and strengths of school staff.	4	3	2	1	DK
6.5	District and building administrators explicitly support special education staff development efforts and provide staff with incentives.	4	3	2	1	DK

LEADERSHIP

7.3.1	Superintendents at the district level (district superintendent and assistant superintendent) agree on the importance of services for students with handicaps and show support for all staff serving students with handicaps.	4	3	2	1	DK
7.3.2	The Principal(s) in this building agree on the importance of services for students with handicaps and show support for all staff serving students with handicaps.	4	3	2	1	DK

Instructional leaders in the school:

7.4	portray the importance of learning and emphasize the value of achievement for all students;	4	3	2	1	DK
7.5.1	set clear standards for quality curriculum and instruction;	4	3	2	1	DK
7.5.2	evaluate appropriate personnel by clear quality standards;	4	3	2	1	DK
7.6	know and can apply teaching and learning principles and can model effective teaching practices for staff as appropriate;	4	3	2	1	DK
7.7.1	establish systems of incentives and rewards for excellence in student performance;	4	3	2	1	DK
7.7.2	establish systems of incentives and rewards for excellence in teacher performance;	4	3	2	1	DK
7.8	expect instructional programs to improve over time - improvement strategies are organized and systematic and are given high priority and visibility;	4	3	2	1	DK

7.9	create a climate of shared decision-making involving students, teachers, principals, parents and school boards in developing regular and special education policies, procedures, and plans;	4	3	2	1	DK
7.10	are skillful in resolving and managing conflict and reacting positively to suggestions and criticisms;	4	3	2	1	DK
7.11	emphasize the improvement of instruction and student performance through on-going staff supervision, observation and consultation.	4	3	2	1	DK
7.12	clearly communicate special education philosophy, priorities, and expectations to staff, parents, students, and the community.	4	3	2	1	DK

ASSESSMENT, DETERMINATION OF SERVICES AND PLACEMENT

Determination of services

8.7	IEPs are planned together by parents, special and regular education service providers, other staff, agency personnel, and students if appropriate.	4	3	2	1	DK
8.10	Handicapped student participation in regular education is facilitated by provisions for adapting and modifying instruction and materials to meet the needs of students functioning at all levels.	4	3	2	1	DK

Placement procedures

8.12	Students with handicaps are placed in the regular education environment whenever possible.	4	3	2	1	DK

INSTRUCTIONAL PRACTICES

IEP implementation

9.7.1	Annual IEP reviews involve all appropriate personnel.	4	3	2	1	DK
9.7.2	Annual IEP reviews include parents.	4	3	2	1	DK
9.8	When appropriate individuals are unable to attend the IEP review, there is an opportunity for them to review the results.	4	3	2	1	DK
9.9	The progress of students with handicaps is evaluated against the IEP and not against the standard curriculum.	4	3	2	1	DK

Instructional practices in the school/community serving students with handicaps

9.11.1	Class sizes and caseloads allow special education staff to meet the individual needs of students with handicaps.	4	3	2	1	DK
9.11.2	Class sizes allow regular education staff to meet the individual needs of students with handicaps.	4	3	2	1	DK
9.12.1	Special education service providers continually diagnose academic needs and prescribe appropriate educational activities for each student.	4	3	2	1	DK
9.12.2	Diagnosis and prescription take student developmental levels, learning styles, and rates of learning into account.	4	3	2	1	DK
9.13.1	Special education teachers use a variety of alternative instructional approaches.	4	3	2	1	DK
9.13.2	Regular education teachers use a variety of alternative instructional approaches.	4	3	2	1	DK
9.14.1	Special education teachers use a variety of instructional grouping patterns, ranging from whole class to one-on-one instruction.	4	3	2	1	DK
9.14.2	Regular education teachers use a variety of instructional grouping patterns, ranging from whole class to one-on-one instruction.	4	3	2	1	DK
9.15.1	Special education teachers use effective instructional practices supported by research.	4	3	2	1	DK
9.15.2	Regular education teachers use effective instructional practices supported by research.	4	3	2	1	DK
9.16	Effective use of time is emphasized in the school's instructional settings to maximize opportunities to learn.	4	3	2	1	DK
9.17	Students with handicaps come to class prepared with their materials.	4	3	2	1	DK
9.18.1	In special education classes, learning activities absorb most of the school day--teachers gain and maintain students' attention and monitor students' time actively engaged in learning.	4	3	2	1	DK
9.18.2	In regular education classes, learning activities absorb most of the school day--teachers gain and maintain students' attention and monitor students' time actively engaged in learning.	4	3	2	1	DK

9.19.1	The progress and achievement of students with handicaps are monitored systematically on an ongoing basis.	4	3	2	1	DK
9.19.2	Student monitoring uses a variety of both formal and informal methods, including test results, grade reports, attendance records, functional behavioral analysis, observation, and other methods to identify potential problems.	4	3	2	1	DK
9.20.1	Special education teachers use evaluations for formative purposes; i.e., instructional diagnosis, prompt feedback to students and parents, and modification of instructional design.	4	3	2	1	DK
9.20.2	Regular education teachers use evaluations for formative purposes; i.e., instructional diagnosis, prompt feedback to students and parents, and modification of instructional design.	4	3	2	1	DK
9.21	Students with handicaps have access to and are encouraged to participate in all academic, vocational, intramural, and extracurricular programs and activities on an equal basis with non-handicapped students.	4	3	2	1	DK
9.22	Students with handicaps are given opportunities to go into the community for functional learning when appropriate.	4	3	2	1	DK
9.23	Materials, activities, and equipment used are adaptive and appropriate to the age, skills, and developmental levels of students.	4	3	2	1	DK
9.24	Regular education teachers share in the responsibility for students with handicaps and adjust regular education services as needed.	4	3	2	1	DK

SCHOOL CLIMATE AND ORGANIZATION OF INSTRUCTION SETTING

Rules for acceptable behavior of staff, students, parents, and administrators within the school are:

10.1	cooperatively developed;	4	3	2	1	DK
10.2	reviewed and reinforced through collaborative efforts of school staff, parents and students; and,	4	3	2	1	DK
10.3	clearly communicated to students and parents through handbooks, written communication, open houses and conferences.	4	3	2	1	DK
10.4	The school is clean and in good repair.	4	3	2	1	DK

10.5.1	Special education students feel an integral part of the school.	4	3	2	1	DK
10.5.2	Special education staff feel an integral part of the school.	4	3	2	1	DK
10.6	School planning reflects the characteristics of the school population and the community.	4	3	2	1	DK
10.7.1	Special education teachers use a variety of techniques to manage behavior successfully.	4	3	2	1	DK
10.7.2	Regular education teachers use a variety of techniques to manage behavior successfully.	4	3	2	1	DK
10.8	In regular education classrooms, physical space and instructional materials are organized to facilitate student learning.	4	3	2	1	DK
10.9.1	Special education teachers relate to students in a caring way both in and out of the classroom.	4	3	2	1	DK
10.9.2	Regular education teachers relate to students in a caring way both in and out of the classroom.	4	3	2	1	DK
10.10	The school program facilitates positive interaction among all students and encourages students without handicaps to accept and understand the abilities, needs, and feelings of their peers with handicaps.	4	3	2	1	DK
10.11	When students with handicaps demonstrate challenging behaviors, a supplementary behavioral plan is developed as part of the IEP.	4	3	2	1	DK

PARENT PARTICIPATION

11.7	There is effective two-way communication and collaboration with parents.	4	3	2	1	DK
11.8	Parents are participants in the staffing - IEP process.	4	3	2	1	DK
11.9	Parents are assisted and encouraged to participate in the implementation of their children's IEPs by supplementing school instruction with supportive home activities.	4	3	2	1	DK
11.10	Parents are participants in planning and supporting the individualized transition program (ITP) process.	4	3	2	1	DK

11.11	Student progress and results of IEP reviews are discussed with and are adequately communicated to parents.	4	3	2	1	DK
11.12	Parents are encouraged to visit the classroom/ learning environment.	4	3	2	1	DK
11.13	Parents are informed of available support groups.	4	3	2	1	DK
11.14	A variety of information and training options are available for parents of children with handicaps.	4	3	2	1	DK

STUDENT PERFORMANCE

For the items below, please use the following rating scale to express your opinion about the extent to which the following outcomes are achieved by the school's population of students with handicaps.

4 - Almost all of the students
3 - Some of the students
2 - Very few students
1 - None of the students
DK - Don't Know

13.12	Commensurate with their abilities, students with handicaps develop competencies in suitable academic areas.	4	3	2	1	DK
13.13	Students with handicaps exhibit positive self-concepts.	4	3	2	1	DK
13.14	Commensurate with their abilities students with handicaps develop the skills necessary for employment.	4	3	2	1	DK
13.15	Students with handicaps develop satisfactory interpersonal skills.	4	3	2	1	DK
13.16	Commensurate with their abilities students with handicaps develop self-help and independent living skills.	4	3	2	1	DK
13.17	Students achieve IEP goals and objectives related to future (long term) expectations.	4	3	2	1	DK

SATISFACTION

For the next section of this survey, please use the following rating scale to express your level of satisfaction with the following areas.

4 - Very Satisfied
3 - Somewhat Satisfied
2 - Somewhat Dissatisfied
1 - Very Dissatisfied
DK - Don't Know

15.9.1	I am satisfied with the overall quality of special education services provided for students with handicaps in this school.	4	3	2	1	DK
15.9.2	I am satisfied with the quality of instructional services provided for students with handicaps in regular education classrooms in this school.	4	3	2	1	DK
15.9.3	I am satisfied with the adequacy of related services provided to students with handicaps in this school.	4	3	2	1	DK
15.9.4	I am satisfied that the school program enables students with handicaps to perform and progress to the best of their ability.	4	3	2	1	DK
15.9.5	I am satisfied that the school effectively integrates students with handicaps into regular education classes.	4	3	2	1	DK
15.9.6	I am satisfied that the school effectively facilitates positive relationships between students with handicaps and their non-handicapped peers.	4	3	2	1	DK
15.9.7	I am satisfied that in this school students with handicaps are treated well by their non-handicapped peers.	4	3	2	1	DK

Please indicate your perception of <u>student satisfaction</u> and <u>parent satisfaction</u> with the overall quality of special education services.

15.2	Students with handicaps are satisfied with the overall quality of their special education services.	4	3	2	1	DK
15.3	Parents of students with handicaps are satisfied with the overall quality of their child's special education services.	4	3	2	1	DK

TIME TO COMPLETE SURVEY: _____ (in minutes)

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT
COLORADO DEPARTMENT OF EDUCATION
MARCH, 1989

DIRECTIONS FOR DISTRIBUTING/ADMINISTERING THE STAFF SURVEY

Decide on the method of administering the survey -- will time to complete the survey be provided at a staff meeting? Will staff be given the survey at a staff meeting to complete on their own time? Will it be distributed in staff mailboxes? The survey takes approximately one hour to complete.

IF THE SURVEY IS COMPLETED AND/OR INTRODUCED AT A STAFF MEETING:

1. Send staff a notice about the purpose, time, place, and length of the meeting.

2. At the meeting, highlight the key points from the STAFF SURVEY OVERVIEW which describes the purpose of the assessment process and the survey. Emphasize the importance of staff participation in the survey of special education program effectiveness. Assure staff that their responses will be kept confidential. Also inform them that a copy of the PROFILE OF EFFECTIVENESS will be made available to them which depicts the survey results for the school as a whole, for the regular education staff responses, and for special education staff responses.

3. Read aloud and/or review the INSTRUCTIONS FOR COMPLETING THE STAFF SURVEY which are on the front of the survey form. Answer any questions staff have about completing the survey and how it will be used. Note that the survey items are numbered according to the numbering system of the Colorado Special Education Quality Indicators.

4. If staff are completing the survey at the meeting, have them put their survey responses in a closed box before they leave the meeting. If they are taking the survey home to complete it, tell them when and where to return it. (Usually the school secretary keeps a closed box and checks off staff names on a return list).

5. Arrange to have staff not present at the meeting complete the survey before the pick up date. Remember that the Principal also completes a regular education staff survey.

IF STAFF RECEIVE THE SURVEY IN THEIR MAILBOXES:

1. Distribute the survey with copies of the STAFF SURVEY OVERVIEW, and a cover MEMO. The cover memo should stress:
   - the importance of staff participation and the value of the information for planning and improvement in your school.
   - the confidentiality of responses
   - the date and place for returning completed surveys

NOTE: There are separate forms for special education staff (blue) and regular education staff (yellow). Staff includes all certified staff who can contribute to the overall evaluation.

COLORADO SPECIAL EDUCATION QUALITY INDICATORS PROJECT
COLORADO DEPARTMENT OF EDUCATION
MARCH, 1989

STAFF SURVEY OVERVIEW

Our school is participating in the Colorado Special Education Quality Indicators Project sponsored by the Colorado Department of Education (CDE). The process was developed by a statewide task force to enable school districts and schools to assess the effectiveness of their special education services and to undertake improvement efforts in targeted areas. A federal cooperative grant has enabled CDE to contract with the Center for Resource Management, Inc. (CRM) in New Hampshire to carry out this pilot effort in 1989 in 15 Colorado high schools.

The first phase of the process involves a self-assessment based on indicators of effectiveness drawn from the literature on effective special education practices and the effective schools research. Information about the extent to which these indicators characterize practices, approaches and conditions in our school is being gathered through staff and student surveys, interviews, and an analysis of student records and other pertinent documents. This pilot effort includes a particular focus on student outcomes.

The purpose of the self-assessment is not to address compliance with state or federal regulations. Rather, it is aimed at providing our school and the special education administrative unit with meaningful evidence of effectiveness and quality as a basis for improvement. The results of our school's self-assessment will be used by our school only. The results from all participating schools will be pooled to look at the association between practice and outcomes and to revise the indicator documents for future use.

The Staff Survey allows you to express your opinion about special education program effectiveness in the following ten areas: resource allocation; staff characteristics; staff development; leadership; assessment, determination of services and placement; instructional practices; school climate and organization of instructional setting; parent participation; student performance; and satisfaction. An 8-page green covered document is available for those wishing more information on the quality indicators project.

Please respond to the survey as honestly as possible. Your responses will be kept confidential. No one in the district will review the individual surveys. Your name should not be written on the survey, and individual responses will not be indicated in the survey results.

You will be able to review the results of the survey in the Profile of Effectiveness which presents all of the program assessment results. These profiles will be developed by the project staff and reported back to our school for use in school improvement planning.

We appreciate your participation in this important process.

If surveys are completed at staff meeting, turn in the survey before leaving the meeting. Place your completed survey in the closed box before leaving.

If surveys are not completed at staff meeting: please return your completed survey by _____ to _____ and you will be checked off the return list.

SPECIAL EDUCATION QUALITY INDICATOR PROJECT

STAFF SURVEY

The Staff Survey allows staff to indicate the extent to which various conditions, practices and approaches associated with effective special education programming are demonstrated in their school setting. The instrument captures information related to: resources; program/curriculum; instructional practices; staff characteristics and relationships; parent participation; school and classroom climate; and, leadership.

These are two versions of the staff survey -- one to be completed by all regular education staff and a longer version with additional items for all special education staff.

Validity

The following factors attest to the validity of the staff survey instrument:

1. The items included in the survey directly relate to the data base of "quality indicators" developed by the Colorado Task Force for Special Education Quality Indicators. Extensive input was also provided through this task force by representatives including special and regular education administrators and teachers and evaluation and special education staff of the Colorado Department of Education. This involvement was intended to create ownership of a process that would lead to better communication and clearer understandings of appropriate evidence for examining the effectiveness of special education services at the local level.

   The Colorado Special Education Quality Indicators were drawn from the national reference document -- "EFFECTIVENESS INDICATORS FOR SPECIAL EDUCATION." This document was developed under the auspices of the Regional Resource Center National Panel on Indicators of Effectiveness for Special Education. The New Hampshire data base of effectiveness indicators served as the primary source for the national document which was produced by CRM (the study subcontractor) through a subcontract from the Mid-South Regional Resource Center (RRC) at the University of Kentucky.

   The RRC indicators were based on an extensive review of the special education and school effectiveness literature. The RRC document also involved extensive review by an expert panel involving both special and regular administration, teachers, and state department of education personnel. The statements thus represent a validated framework of evidence drawn from both research and practice that can be used to ensure validity in evaluation efforts at the local level.

2. Survey items were developed which directly related to the data base of quality indicators. The survey is an adaptation of a similar survey instrument that has been used extensively with LEA sites under the statewide New Hampshire Special Education Program Improvement Partnership Project. Similar to New Hampshire, there is a longer version of the survey instrument to be completed by special education staff and a shorter version for regular education staff.

3. A draft survey instrument was developed by CRM for the Colorado study. The survey instrument was reviewed by staff of the Colorado Department of Education's Planning and Evaluation Unit and Special Education Units and representatives of the Colorado Task Force for Special Education Quality Indicators to determine their relevance to the Colorado federal/evaluation study. The items were also reviewed for clarity and their appropriateness for both special and regular education staff.

4. Individuals reviewing the survey instrument felt it was highly applicable to the Colorado effort. Based on their recommendations, minor changes were made in the wording of some items.

5. The instrument will be piloted with a group of secondary special and regular education staff in Colorado before being finalized.

Reliability

Reliability refers to the likelihood that a measurement procedure will yield the same description of a given phenomenon if that measurement is repeated either with the same sample at different points in time, or when asked of different respondents concerning the same case. There are a number of techniques that can be used to ensure that reliable measurements are obtained. First, respondents should only be asked to answer questions which they are likely to understand and have a response. The extensive piloting of very similar survey instruments in New Hampshire and actual use with over 400 special education staff and over 2,500 regular education staff indicated that staff were able to both understand the items and respond.

To ensure that respondents are not encouraged to provide unreliable responses, "don't know" is an acceptable response for all questions and we have allowed for this. Also, based on careful review, items were not included in the regular education staff version of the survey representing areas about which their staff would have minimal knowledge.

The reliability of the New Hampshire survey results has been substantiated by the extent to which over 25 school district teams serving their local survey results (from over 90 schools) felt the findings represented highly reliable and relevant assessments of their special education programs. In addition, split sample reliability is being statistically determined for the survey data in New Hampshire.

In addition to piloting the survey instruments in Colorado, split sample reliability will be determined through the use of the survey instruments in the first two high school sites.

Finally, it should be noted that our method will include procedures and the use of materials designed to ensure that all staff completing the surveys clearly understand the purpose of survey and the instructions for completing it. We have included sample materials from the New Hampshire project which will be adapted for the Colorado initiative.

APPENDIX E

Table E-1

Table E-2

TABLE E-1
Comparison of High School Special Education Students Who Received Grades
With Those Who Did Not, by Curricular Area and Selected Descriptive Characteristics

	English/ Language Arts		Math		Science		Social Studies		Vocational Education	
	No Grade	Graded	No Grade	Graded	No Grade	Graded	No Grade	Graded	No Grade	Graded
Grade Level	22.8	77.2	39.2	60.8	53.5	46.5	39.1	60.9	66.0	34.0
9th (n=277)	20.6	79.4	21.3	78.7	48.0	52.0	43.7	56.3	76.5	23.5
10th (n=275)	18.5	81.5	29.8	70.2	39.6	60.4	33.1	66.9	69.1	30.9
11th (n=211)	22.7	77.3	49.8	50.2	64.9	35.1	29.4	70.6	56.9	43.1
12th (n=155)	34.2	65.8	73.5	26.5	72.3	27.7	54.8	45.2	54.2	45.8
Handicap. Condition	22.3	77.7	39.0	61.0	53.3	46.7	38.9	61.1	65.7	34.3
Perceptual/ Communicative (n=537)	19.7	80.3	36.7	63.3	46.4	53.6	35.0	65.0	69.6	30.4
Emotional/ Behavioral (n=223)	25.6	74.4	40.8	59.2	56.1	43.9	35.4	64.6	65.5	34.5
MentalRetardation (n=86)	29.1	70.9	40.7	59.3	86.0	14.0	60.5	39.5	43.0	57.0
Gender	22.5	77.5	39.0	61.0	53.3	46.7	38.9	61.1	65.7	34.3
Male (n=626)	21.9	78.1	38.2	61.8	52.1	47.9	38.5	61.5	63.1	36.9
Female (n=287)	23.7	76.3	40.8	59.2	56.1	43.9	39.7	60.3	71.4	28.6
Setting	21.4	78.6	38.5	61.5	52.9	47.1	38.5	61.5	65.4	34.6
Mainstreamed (n=641)	16.2	83.8	38.2	61.8	48.7	51.3	33.1	66.9	67.6	32.4
Self-Contained (n=257)	34.2	65.8	39.3	60.7	63.4	36.6	52.1	47.9	59.9	40.1

TABLE E-2
Grade Performance Distributions of High School Special Education Students Who Received Grades:
Five Curricular Areas by Grade Level
Academic Year 1988-89

	ENGLISH/LANGUAGE ARTS					MATHEMATICS				
	9th (n=220)	10th (n=224)	11th (n=163)	12th (n=102)	All	9th (n=218)	10th (n=193)	11th (n=106)	12th (n=41)	All
Above Satisfactory	23	25	37	30	28	24	22	24	32	24
Satisfactory	26	32	28	35	30	30	28	36	22	30
Below Satisfactory	51	44	35	34	43	46	50	40	46	46

	SCIENCE					SOCIAL STUDIES				
	9th (n=144)	10th (n=166)	11th (n=74)	12th (n=43)	All	9th (n=156)	10th (n=184)	11th (n=149)	12th (n=70)	All
Above Satisfactory	27	30	20	33	27	20	19	32	21	23
Satisfactory	19	28	32	35	26	21	27	34	44	29
Below Satisfactory	54	43	47	33	46	58	54	34	34	48

	VOCATIONAL EDUCATION				
	9th (n=65)	10th (n=85)	11th (n=91)	12th (n=71)	All
Above Satisfactory	49	44	52	61	51
Satisfactory	28	28	35	25	30
Below Satisfactory	23	28	13	14	20

APPENDIX F

Table F-1

TABLE F-1
Comparison of High School Special Education Students Who Were Surveyed With Those Not Surveyed, by Selected Descriptive Characteristics

	Surveyed	Not Surveyed
TOTAL	(N=601)	(N=313)
Grade Level		
9th	31.6	27.8
10th	29.5	31.0
11th	21.6	25.2
12th	17.5	16.0
Handicapping Conditions		
Perceptual/Communicative	65.5	47.6
Emotional/Behavioral	19.4	34.7
Mental Retardation	9.1	10.3
Other	6.1	7.4
Gender		
Male	70.1	65.7
Female	29.9	34.3
Setting		
Mainstreamed	71.5	71.2
Self-Contained	28.5	28.8

APPENDIX G

Table G-1

TABLE G-1
Grade Performance Distributions of High School Special Education Students Who Received Grades.
Five Curricular Areas by Type of Handicapping Condition
Academic Year 1988-89

Perceptual/Communicative

	English/Language Arts (n=430)	Mathematics (n=339)	Science (n=287)	Social Studies (n=349)	Voc. Education (n=264)
Above Satisfactory	28	23	30	22	53
Satisfactory	30	31	29	30	29
Below Satisfactory	42	46	40	48	18

Emotional/Behavioral

	English/Language Arts (n=166)	Mathematics (n=132)	Science (n=98)	Social Studies (n=144)	Voc. Education (n=77)
Above Satisfactory	16	18	17	18	38
Satisfactory	28	27	16	27	39
Below Satisfactory	56	55	66	55	23

Mental Retardation

	English/Language Arts (n=61)	Mathematics (n=51)	Science (n=12)	Social Studies (n=34)	Voc. Education (n=49)
Above Satisfactory	49	41	33	41	67
Satisfactory	25	20	33	26	16
Below Satisfactory	26	39	33	32	16

APPENDIX H

Table H-1

TABLE H-1
Distributions of Frequency of Participation in Selected Activities of Special Education Students by Type of Handicapping Condition

	Never	At Least Once a Year	At Least Once a Month	At Least Once a Week
Go grocery shopping				
Perceptual/Communicative	8.5	8.5	29.4	53.6
Emotional/Behavioral	8.5	5.7	38.7	47.2
Mental Retardation	7.5	7.5	24.5	60.4
Go clothes shopping				
Perceptual/Communicative	3.6	22.6	52.9	20.9
Emotional/Behavioral	.9	32.4	50.0	16.7
Mental Retardation	7.7	21.2	40.4	30.8
Go to a movie				
Perceptual/Communicative	7.5	18.8	50.3	23.5
Emotional/Behavioral	12.1	20.6	38.3	29.0
Mental Retardation	16.0	20.0	30.0	34.0
Go to a sporting event				
Perceptual/Communicative	14.2	25.1	35.9	24.8
Emotional/Behavioral	26.0	19.2	31.7	23.1
Mental Retardation	44.2	15.4	28.8	11.5
Go to a restaurant				
Perceptual/Communicative	3.8	5.8	46.0	44.4
Emotional/Behavioral	4.6	10.2	35.2	50.0
Mental Retardation	7.7	9.6	46.2	36.5
Visit with friends at a local place				
Perceptual/Communicative	7.8	6.9	16.1	69.3
Emotional/Behavioral	11.2	4.7	15.0	69.2
Mental Retardation	33.3	2.0	21.6	43.1

TABLE H-1, continued
Distributions of Frequency of Participation in Selected Activities of Special Education Students by Type of Handicapping Condition

	Never	At Least Once a Year	At Least Once a Month	At Least Once a Week
Visit friends' houses				
Perceptual/Communicative	4.5	2.5	16.4	76.6
Emotional/Behavioral	6.7	3.8	16.3	73.1
Mental Retardation	22.6	5.7	17.0	54.7
Talk with friends on the phone				
Perceptual/Communicative	8.0	2.2	7.7	82.0
Emotional/Behavioral	8.4	5.6	5.6	80.4
Mental Retardation	15.4	5.8	9.6	69.2
Go to a party				
Perceptual/Communicative	13.6	11.6	24.4	50.4
Emotional/Behavioral	17.0	11.3	17.0	54.7
Mental Retardation	31.4	13.7	21.6	33.3
Attend a church/synagogue				
Perceptual/Communicative	34.5	17.3	17.0	31.2
Emotional/Behavioral	43.5	17.6	13.0	25.9
Mental Retardation	36.0	6.0	28.0	30.0
Go on vacation/trip				
Perceptual/Communicative	10.6	64.1	17.0	8.4
Emotional/Behavioral	12.3	64.2	13.2	10.4
Mental Retardation	11.3	50.9	17.0	20.8

NOTE: Samples sizes for each of the handicapping conditions differed slightly for each item, but ranged between 359 and 365 for perceptual/communicative, between 104 and 108 for emotional/behavioral, and between 50 and 53 for mental retardation.

APPENDIX I

Table I-1

TABLE I-1
Mean Absence Rates of High School Special Education Students in Three Grade Performance Categories, by Curricular Area

	Mean	SD	n
English/Language Arts			
Above Satisfactory	5.8	5.46	194
Satisfactory	7.7	8.08	211
Below Satisfactory	13.9	12.25	296
Mathematics			
Above Satisfactory	5.2	4.93	131
Satisfactory	7.4	7.57	164
Below Satisfactory	14.0	12.77	254
Science			
Above Satisfactory	6.0	4.99	114
Satisfactory	7.5	7.84	119
Below Satisfactory	13.8	11.38	192
Social Studies			
Above Satisfactory	6.0	6.48	128
Satisfactory	7.2	8.13	159
Below Satisfactory	12.5	11.29	267
Vocational Education			
Above Satisfactory	5.6	7.00	154
Satisfactory	11.1	9.65	89
Below Satisfactory	15.7	13.30	58

APPENDIX J

Table J-1

TABLE J-1
Grade Performance Distributions by Incidence of Suspension
by Curricular Area

	Not Suspended	Suspended Once	Suspended At Least Twice
English/Language Arts	(n=596)	(n=62)	(n=68)
Above Satisfactory	31.4	8.1	10.3
Satisfactory	29.9	30.6	26.5
Below Satisfactory	38.8	61.3	63.2
Mathematics	(n=457)	(n=55)	(n=63)
Above Satisfactory	27.8	9.1	9.5
Satisfactory	30.2	29.1	23.8
Below Satisfactory	42.0	61.8	66.7
Science	(n=351)	(n=36)	(n=53)
Above Satisfactory	29.6	13.9	15.1
Satisfactory	29.9	22.2	15.1
Below Satisfactory	40.5	63.9	69.8
Social Studies	(n=473)	(n=46)	(n=54)
Above Satisfactory	25.6	8.7	11.1
Satisfactory	30.4	21.7	16.7
Below Satisfactory	44.0	69.6	72.2
Vocational Education	(n=260)	(n=31)	(n=26)
Above Satisfactory	53.6	35.5	42.3
Satisfactory	29.6	32.3	23.1
Below Satisfactory	16.5	32.3	34.6

APPENDIX K

Student Interview Summary

STUDENT INTERVIEW SUMMARY

A total of 189 students at 14 high schools were interviewed. Nineteen students were categorized as mentally retarded, 35 with emotional/behavioral handicaps, and 135 with perceptual/communicative disabilities (learning disabled).

Course Taking and Student Placement

Interviewed students were asked to indicate whether they are taking English, mathematics, social studies, science, and vocational education courses in regular classrooms or the resource room. The table on page 155 presents the percentage of students by handicap group taking various subjects by setting, and an analysis by subject area is presented below.

English/Language Arts

- All of the mentally retarded students (100%), 91% of LD students, 89% of emotional/behavioral students reported taking English/language arts classes.
- 65% of the LD students, 55% of the emotional/behavioral students, and 16% of the mentally retarded students receive English instruction in regular classrooms. The remainder received instruction in the resource room.

Mathematics

- About one-half of the emotional/behavioral students (49%) and LD students (46%) reported not taking mathematics. Only 5% of the mentally retarded students did not take mathematics.
- 79% of the LD students, 56% of the emotional/behavioral students, and one-third of the mentally retarded students (33%) received instruction in regular classrooms. The remainder received instruction in the resource room.

Social Studies

- 47% of the mentally retarded students, about one-quarter of the LD students (26%), and 17% of the emotional/behavioral students reported not taking social studies.
- Almost three-quarters of the emotional/behavioral (72%) and LD students (72%) received instruction in regular classrooms, and 10% of mentally retarded students took social studies in regular classes. The remainder received instruction in the resource room.

Science

- More than half of the students in each group reported not taking the subject of science (emotional/behavioral - 54%; mentally retarded - 53%; LD - 53%).

- 82% of the LD students. 56% of the emotional/behavioral students, and 22% of the mentally retarded students received science instruction in regular classrooms. The remainder received instruction in the resource room.

Vocational Education

- 54% of emotional/behavioral students, 49% of LD students, and 42% of mentally retarded students reported not taking vocational educational classes.

- 88% of LD students, 81% of emotional/behavioral students, and more than one-quarter of mentally retarded students (27%) received vocational education instruction in regular classrooms. The remainder received instruction in the resource room.

Percentage Distribution of Students Taking Various Subjects by Handicap Group

English/Language Arts

Handicap Group	Subject Not Taken	Subject Taken	
		Regular	Resource
Mentally Retarded	–	100%	
		16%	84%
Emotional/Behavioral	11%	89%	
		55%	45%
Perceptual/Communicative (LD)	9%	91%	
		65%	35%

Mathematics

Handicap Group	Subject Not Taken	Subject Taken	
		Regular	Resource
Mentally Retarded	5%	95%	
		33%	67%
Emotional/Behavioral	49%	51%	
		56%	44%
Perceptual/Communicative (LD)	46%	54%	
		79%	21%

Social Studies

Handicap Group	Subject Not Taken	Subject Taken	
		Regular	Resource
Mentally Retarded	47%	53%	
		10%	90%
Emotional/Behavioral	17%	83%	
		72%	28%
Perceptual/Communicative (LD)	26%	74%	
		72%	28%

Science

Handicap Group	Subject Not Taken	Subject Taken	
		Regular	Resource
Mentally Retarded	53%	47%	
		22%	78%
Emotional/Behavioral	54%	46%	
		56%	44%
Perceptual/Communicative (LD)	53%	47%	
		82%	18%

Vocational Education

Handicap Group	Subject Not Taken	Subject Taken	
		Regular	Resource
Mentally Retarded	42%	58%	
		27%	73%
Emotional/Behavioral	54%	46%	
		81%	19%
Perceptual/Communicative (LD)	49%	51%	
		88%	12%

Other Classes

More than 40% of the students reported taking physical education classes. Three percent of the emotional/behavioral students and 8% of the LD students reported taking music classes. More than 30% of mentally retarded and LD students reported taking art classes; 11% of the emotional/behavioral students reported taking this subject. These results are presented in the table below by handicap group.

Percent of Students Who Reported Taking Physical Education, Music, and Art Classes by Handicap Group

	Phys. Ed.	Music	Art
Mentally Retarded	53%	–	37%
Emotional/Behavioral	43%	3%	11%
Perceptual/Communicative (LD)	43%	8%	37%

In addition, students were asked about classes they wanted to take but were not offered at the school and classes offered that they were not able to take and the reasons why. Forty-six percent of the emotional/behavioral students, 30% of the LD students, and 16% of the mentally retarded students reported classes that were not offered at the school. More than 30% of the students in each group reported on classes offered at the school that they were not able to take. Results are presented below by handicap group.

Mentally Retarded

- 16% of the students reported subjects they wanted to take but were not available at the school, including child development, medicine, and more weight training.
- 37% reported that there were subjects offered they would have liked to take but couldn't, including mechanics, sports, art, music, metals, weight lifting, American History, and Spanish. Reasons for not taking these classes included being advised against it, needing to fulfill other requirements, not eligible to take a class, that the class was full, their low reading ability, and their disability.

Emotional/Behavioral

- 46% of the students reported that there were subjects they would like to take, but weren't offered by the school, including business math, computer repair, audio engineering, child care, mixed chorus, more computer classes, more advanced classes, ballet, swimming, ROTC, a study skills class, guitar, oriental language, AP physics, sign language, skiing, rock climbing, electronics, mixed chorus, and home finance.

- 37% reported that there were classes offered by the school that they weren't able to take, including speedwriting, music, art classes such as photography, drawing jewelry making, and painting, computer programming, advanced classes, welding, physical education, American Literature, and Spanish. The most frequently reported reason for not taking these classes was schedule conflicts, followed by the class being full, and not having fulfilled course prerequisites. Other reasons included the class being too difficult for the students' ability level and the course not being offered due to low enrollment.

Perceptual/Communicative (LD)

- 30% of the students reported that there were classes not offered by the school that they would like to take, including choir, drivers education, agriculture, architecture, airplane mechanics, child care, ROTC, guitar lessons, auto mechanics, health, restaurant arts, diesel mechanics, baseball, art classes, more weight lifting, sports medicine, welding, cosmetology, graphic arts, wood, machine, or metal shop, water skiing, outdoor education, swimming, health education, firefighting, trigonometry, martial arts, fashion design, German, French, more foreign language, law, law enforcement, communications, and boxing.

- 33% reported courses that were available but that they weren't able to take, including physical education, art, computers, music, drafting, auto shop, algebra, cosmetology, math, regular classes, language classes, psychology, college-preparatory composition, botany, accounting, bookkeeping, typing, and math in the resource room. The most frequently reported reasons for not taking classes were schedule conflicts and that the class was full, followed by being advised not to take a class, and because the class was too hard for them. Other reasons included not knowing a class was available, prerequisites, low enrollment, and not enough time.

Student Satisfaction with Classes

Students were asked to indicate which of the five major subject areas were their favorite and least favorite classes and what made these classes their favorite or least favorite. Some students indicated more than one favorite or least favorite class and others did not report having favorites or least favorites.

Most Favorite Classes. While mentally retarded students most frequently reported their favorite class to be mathematics (42%), emotional/behavioral and LD students most frequently cited vocational education as a favorite class (29% and 33% respectively). The subject second most frequently cited by each group was English/language arts. Regarding why particular classes are their favorites, each of the groups most frequently cited liking the subject itself most, followed by liking the teacher.

Least Favorite Classes. While student opinions regarding least favorite subjects varied, emotional/behavioral students most frequently cited social studies as their least favorite class (37%), mentally retarded students cited mathematics (32%), and LD students cited English (27%). Mentally retarded and emotional/behavioral students most frequently cited not liking the teacher in their least favorite classes and LD students reported that the subject is boring. The factor second most frequently cited by mentally retarded and LD students was that their least favorite subject was hard.

These results are presented below by handicap group. Please note that percentages may not add to 100% because some students had more than one response and some failed to provide a response.

Most Favorite Classes

Mentally Retarded

- 42% cited mathematics, 37% cited English as their favorite class, 16% cited vocational education, and 16% did not report a favorite class.

- 42% reported being interested in the subject itself and liking the activities involved; 32% reported liking the teachers in their favorite class; and 16% reported having friends in their favorite class.

Emotional/Behavioral

- 31% cited vocational education, 29% each cited English and mathematics as their favorite class, 26% cited social studies, and 9% did not report having a favorite subject.

- 31% reported that they like the subject itself and that it is interesting to them; 23% reported enjoying their favorite class because they have a good teacher who makes the class fun, and also described teachers in their favorite classes as understanding, dynamic, having a positive attitude, caring, and one who helps students.

Perceptual/Communicative (LD)

- 24% cited vocational education, 19% cited English as their favorite class, 14% cited social studies, 13% cited mathematics, and 10% cited science. In addition, 9% of the students reported liking all of these classes, 2% did not report a favorite subject.

- 33% of the students reported that they liked their favorite subject because it was interesting to them; 18% reported having good teachers in their favorite subject; 16% reported liking the teacher in their favorite class; 13% reported that they get help from the teacher in these classes; 9% report that the class is fun; and 8% said that having friends in class made it their favorite subject.

Least Favorite Classes

Mentally Retarded

- 32% cited mathematics, 11% each cited English, social studies, and science as their least favorite class, 5% cited vocational education, and 32% did not report having a least favorite class.

- 21% reported that they didn't like the teacher in their least favorite class and described the teacher as one who is boring, strict, and doesn't explain enough; 16% reported not liking a class because it is hard; and 11% do not like the subject itself.

Emotional/Behavioral

- 37% cited English as their least favorite class, 17% cited mathematics, 40% cited social studies, 6% cited science, 3% cited vocational education, and 17% did not report a least favorite class.

- 34% of the students reported not liking the teacher in their least favorite class, and described the teacher as boring, ineffective, not positive, and one who doesn't care and is irresponsible; 23% reported that the class is boring and that they do the same thing every day and don't feel they have learned anything; 14% reported not liking the subject itself; and 11% reported that the work in their least favorite subject is hard.

Perceptual/Communicative (LD)

- 27% cited English as their least favorite class, 13% cited mathematics, 21% cited social studies, 13% cited science, 3% cited vocational education, and 16% did not report a least favorite class.

- 14% reported that their least favorite class is boring; 13% stated that the class is hard for them; 10% reported not liking the teacher; 9% reported not liking the work required in their least favorite class; and 8% reported not liking the subject itself.

Other Classes

Those students who took physical education, music, or art reported on their likes and dislikes about these classes. These results are presented by handicap group below.

Mentally Retarded

- 53% of these students reported taking physical education classes. Some of the reasons for liking the class reported by students included liking particular activities in the class, that it is fun, and that there is no homework. One-third of the students taking physical education reported disliking particular aspects of the class.

- 37% of the students reported taking art, and reported liking activities such as painting and drawing. None of the students reported disliking the class.

Emotional/Behavioral

- 43% of the students reported taking physical education classes. The most frequently reported reason for liking physical education was that they liked to be active; other reasons included that it was relaxing and helped in reducing stress, students liked particular activities, and that it was an easy grade. Reasons for not liking the class included having to change their clothes, being graded on ability not effort, too competitive, equipment in poor condition, and the teacher being inflexible.

- 3% of the students took music classes. One student reported that they would like to make it a career, and another disliked the music picked out by the teacher.

- 11% of the students reported taking art. Reasons for liking the class included working with their hands, the opportunity to be creative, that the class gave them immediate reinforcement, and that it was relaxing. Dislikes reported by students included the many assignments, that a photography course was expensive, and that if they finished their work early they didn't have other assignments to do.

Perceptual/Communicative (LD)

- 43% of the LD students reported taking physical education classes. The most frequently reported reason for liking physical education reported by students taking the class was the particular activities in the class (24%), followed by the class being fun (17%), and the opportunity to be active (13%). Other reasons included not having homework, getting good exercise and keeping in shape, the class is relaxing, and that they like the teacher.

- 8% of the students reported taking music, stating that they liked the class because they like singing, playing guitar, performing different types of music, that the class was fun, they went on trips, and learned a lot. Dislikes included other students in the class not knowing the music, and not liking band.

- 37% took art classes. Students most frequently reported that they liked the activities in class, followed by the opportunity to be creative, that the class was fun, they were good at the subject, and liked making things and working with their hands. Other reasons included being able to express themselves, the class was interesting and relaxing, and they are able to get a good grade. Students reported disliking the class because of the tests, they failed the subject, the material presented was not meaningful, and that other students made fun of them.

Grade Performance

Students were asked to indicate whether they were receiving satisfactory (C or above; 70 or above) or below satisfactory grades (below a C or below 70) in the subjects they were taking. An analysis by subject area is presented below, and the table on the following page displays these results by handicap group. It should be noted that the data is presented as students reported it, and that percentages of satisfactory and below satisfactory grades may not be consistent with data collected and presented in student outcome tables.

- At least 82% of the students in each handicap group reported receiving satisfactory grades for each of the curricular areas.

- In the academic areas, the highest percentage of satisfactory grades was reported by emotional/behavioral students for the subject of social studies (97%). The highest percentages of below satisfactory grades was reported by LD students for the subject of mathematics (20%) and mentally retarded students for for the subject of English/language arts (18%).

- 100% of the emotional/behavioral and LD students and 91% of the mentally retarded students taking vocational education received satisfactory grades.

Percentage Distribution of Satisfactory/Below Satisfactory Grades in Various Subject Areas
As Reported by Students

English/Language Arts

Handicap Group	Satisfactory (70 or above)	Below Satis. (below 70)
Mentally Retarded	82%	18%
Emotional/Behavioral	87%	13%
Perceptual/Communicative (LD)	91%	9%

Mathematics

Handicap Group	Satisfactory (70 or above)	Below Satis. (below 70)
Mentally Retarded	87%	13%
Emotional/Behavioral	89%	11%
Perceptual/Communicative (LD)	80%	20%

Social Studies

Handicap Group	Satisfactory (70 or above)	Below Satis. (below 70)
Mentally Retarded	91%	9%
Emotional/Behavioral	97%	3%
Perceptual/Communicative (LD)	87%	13%

Science

Handicap Group	Satisfactory (70 or above)	Below Satis. (below 70)
Mentally Retarded	89%	11%
Emotional/Behavioral	87%	13%
Perceptual/Communicative (LD)	89%	11%

Vocational Education

Handicap Group	Satisfactory (70 or above)	Below Satis. (below 70)
Mentally Retarded	91%	9%
Emotional/Behavioral	100%	--
Perceptual/Communicative (LD)	100%	--

Students were also asked about what helps them get passing grades and what leads to failing grades. Students in each handicap group most frequently cited doing their work, followed by studying as factors leading to passing grades. All of the groups most frequently cited not doing the work as a factor leading to failing grades. Mentally retarded and emotional/behavioral students cited absence second most frequently and LD students cited lack of effort/interest as the second most frequent factor leading to failing grades. These results are presented below by handicap group.

Mentally Retarded

- 58% of the students reported that doing their work leads to passing grades; 26% cited studying; 16% cited their teachers; and 11% cited asking questions when they don't understand.

- Reasons for failing grades included not doing the work (37%), absence (16%), and not liking the class (11%).

Emotional/Behavioral

- 31% of the students reported that doing their work leads to passing grades; 20% cited studying; 20% cited help from their teachers; and 11% cited help from their resource room teachers.

- Regarding what leads to failing grades, 43% of the students cited not doing their work; 17% cited absence; 9% cited not liking the subject or class; and 9% cited the teaching style.

Perceptual/Communicative (LD)

- 36% of the students reported that doing their work leads to passing grades; 33% cited studying; 12% cited help from teachers; 12% cited attendance; 9% cited working hard; and 9% cited paying attention in class.

- Reasons for failing grades included not doing the work (30%), lack of effort/lack of interest (16%); not studying (14%); not understanding the subject or material (12%); and absence (10%).

Student Satisfaction -- Relationships with Other Students

Interviewed students reported on their satisfaction regarding relationships with other students in the school. All of the mentally retarded students reported that they were satisfied with their overall relationships with other students. Sixty-six percent of the emotional/behavioral students reported being satisfied, 17% were not satisfied, and 17% reported mixed feelings. Of the LD students, 87% reported being satisfied in their relationships with other students, 9% were not satisfied, and 4% reported mixed feelings.

With regard to reasons for satisfaction, students most frequently reported that the students in the school were nice, friendly, and respected each other, and that they felt they "get along OK" with other students. Students who were dissatisfied gave as reasons, cliques and peer pressure in their schools, as well as the attitudes of other students. Students with mixed emotions most frequently reported that while there were students who were friendly and with

whom they get along, there are those who pick on them and tease them. In addition, students also reported mixed emotions about the groups at school. Reflective of many student responses, one student reported that there were "a lot of cliques" in the school and that it "may be hard to cross some barriers" and another student stated, "It's OK. It's not really bad -- everyone minds their own business and hangs out in their own groups."

When asked whether they felt left out or treated differently by other students, 37% of the mentally retarded students and 63% of the emotional/behavioral and LD students responded affirmatively. Interviewed students were generally able to cite specific instances and describe general feelings of being left out. While responses varied, commonly reported reasons included feeling ignored, not belonging to a group, being a freshman or new student in the school, and other students' attitudes towards them. Expressing feelings held by many students of being left out or not belonging to a group, one student stated, "It's the way school is -- you can't be friend if you're not in a group." Few students reported feeling left out because of their involvement in special education.

Best Experiences

When asked about their "best experiences" in school, mentally retarded students most frequently reported on particular classes or subjects (21%), followed by jobs they did at school (16%), such as library assistant or working in the attendance office, and friends (11%). Emotional/behavioral students most frequently reported on particular subjects (20%) followed by friends in school (20%), particular teachers they had (11%). In addition, 17% of the emotional/behavioral students reported no best experience. While 15% of LD students most frequently reported having had no best experience, 12% reported about friends and social activities with them, followed by participation in sports (9%), and particular subjects (8%).

Worst Experiences

Regarding their "worst experiences," the most frequent response of mentally retarded studentss was that they had no worst experience (42%), but 11% cited their first day at the school (11%). Emotional/behavioral students most frequently reported particular classes or subjects (17%) as their worst experience, followed by poor grades (9%), and fights in school (9%). Eleven percent of the emotional/behavioral students did not report having had a worst experience. While LD students most frequently reported no worst experience (23%), students second most frequently reported being "picked on" (8%), followed by poor grades (7%), being a new student in the school (7%), and particular subjects (5%).

Teacher Expectations and Support

Regular Education Teachers

Eleven of the 19 mentally retarded students, 34 of the 35 emotional/behavioral students, and 131 of the 135 interviewed LD students reported their perceptions of regular education teacher expectations and teacher support for student success. Students also reported on the types of help they received from teachers and whether they needed additional help. It should be noted that students who did not indicate having been in regular classrooms during the 1988-89 school year may have reported on their experiences from previous semesters or years.

Expectations

Mentally Retarded

Four of the 11 mentally retarded students felt that their teachers made them work hard, commenting that "they make me do what everyone else is doing" and "if you do the work you get treated fairly." Four felt that their regular education teachers are easy. In addition, three of the mentally retarded students reported mixed feelings.

Emotional/Behavioral

About half of emotional/behavioral students reported that their regular education teachers made them work hard, nine felt the teachers were easy, and seven reported mixed feelings. Students who felt their teachers made them work hard reported that teachers give them a lot of work, expect a lot of work, and that they help the students when needed. Individuals with mixed feelings generally reported that it depended on the teacher. Reflecting the comments of a number of students, one student stated, "Some teachers are pretty good -- they're willing to help and answer questions. They don't put students down for not knowing. Some teachers act like they don't care -- they ignore students and don't help."

Perceptual/Communicative (LD)

Fifty-three percent of the LD students reported that their teachers made them work hard, 31% reported mixed feelings, and 16% reported that their teachers were easy. Students most frequently reported feeling that their teachers are hard because they set high expectations and push students. Students also frequently reported feeling that teachers expect them to work hard, to do well and succeed, and that the teachers expect students to get good grades. Those students who feel the teachers are easy most frequently reported that the teachers give them time to do their work, don't pressure them, and that the teachers are easy because they are special education students. Students with mixed feelings most frequently reported that it depended on the teacher and that it depended on the class. They also reported that they are expected to do the work, but that it was easy.

Support

Mentally Retarded

While eight of the 11 mentally retarded students felt that their regular education teachers cared about whether they succeed, three reported mixed feelings. Students who indicated high teacher expectations reported that the teachers help them want them to finish school, and want them to learn. The type of help students get from teachers included help with their work and explanation of assignments. Four students reported that they could use more help from regular education teachers, citing the need for more individualized help.

Emotional/Behavioral

More than half of the emotional/behavioral students (65%) felt that regular education teachers care about their success, nine (26%) reported mixed feelings, two said they didn't know, and one felt that teachers didn't care. Of those reporting high levels of caring, students most frequently reported feeling that way because they get help when it's needed, that teachers like to see students do well and be successful, and that teachers want to help students get through

school and graduate. Students also reported that teachers talk with them about problems, personal or academic, and feel that teachers want them to live up to their potential. Students with mixed feelings generally reported that "some teachers care and some don't." Regarding the type of help they received from regular education teachers, eight of the students reported that they had to ask for help if they needed it -- teachers would explain more to the whole class and there were too many students for individual help. While four students reported that they didn't receive much help, four felt that they received whatever they needed. Three students reported receiving the same type of help as other students. Half of the emotional/behavioral students reported that they needed more help from their regular education teachers. Students cited needs, including more and better explanation, one-on-one instruction, and smaller classes.

Perceptual/Communicative (LD)

The majority of LD students (80%) felt that their regular education teachers cared about student success, 18% reported mixed feelings, and 2% did not feel that their teachers cared. Students who feel that their teachers care most frequently reported that it was because their teachers push them to do well and succeed (22%) and help students (22%). Students also reported feeling that their teachers want them to graduate (9%), that teachers talk with students (7%) and exhibit that they care (7%). Students with mixed feelings most frequently reported that "some teachers do, some don't" (83%). Students also reported feeling that it depended on whether the teacher liked the student (13%), and that teachers didn't care because they didn't help (9%). Fifteen percent (15%) of the students reported that they received help if needed, 12% reported that they receive the same type of help as other students, and 12% said that they get help only if they ask. Eleven percent (11%) reported that teachers help by explaining and clarifying and 10% reported receiving help with their work. Seven percent of the students reported that they received no help from regular education teachers, and 5% said that they didn't receive much help. One-third of the LD students (31%) reported needing more help from regular education teachers, most frequently citing the need for explanation and clarification. Students also desired more on-on-one instruction, and for teachers to be available more often.

Resource Room Teachers

Eighteen of the 19 mentally retarded students, 32 of the 35 emotional/behavioral students, and 98 of the 135 interviewed LD students reported on their perceptions of resource room teacher expectations and teacher support for student success. Students also reported on the types of help they received from teachers and whether they needed additional help. It should be noted that students who did not indicate having been in the resource room during the 1988-89 school year may have reported on their experiences from previous semesters or years.

Expectations

Mentally Retarded

Seven of the 19 mentally retarded students reported that their resource room teachers made them work hard; six reported mixed feelings; four felt that the resource teachers were easy; and one student didn't know. Teachers helping with and ensuring that students complete their work were reasons reported by students for why they felt their teachers made them work hard. Teachers' emphasis on getting good grades and getting into regular education classes were also cited by students. Students who reported that resource room teachers were easy with

them commented that the teachers didn't rush them and were easy except on the kids who didn't want to study. Students with mixed feelings voiced a variety of perceptions regarding resource room teacher expectations, including: "they want me to get good grades, but don't push it" and they're just trying to help you through school."

Emotional/Behavioral

About half of the emotional/behavioral students (53%) felt that their resource teachers expected them to work hard, eight (25%) reported feeling that the teachers were easy, and seven (22%) had mixed feelings. Students most frequently reported that teachers expected them to work hard but help them and that there was a high level of trust and friendship between teacher and student. Other reasons cited by students included expectations for completion of work and that teachers want students to do their best. Students with mixed feelings generally reported that they are expected to work hard, that the classes are either easy or they work hard to get good grades, but that teachers take it easy on them. Students who felt the resource room teachers were easy reported that they weren't pressured about their work and went at their own pace.

Perceptual/Communicative (LD)

Sixty-one percent of the LD students felt that resource room teachers expected them to work hard, 24% reported that teachers were easy, and 15% reported mixed feelings. Students most frequently stated that their teachers made them work hard (16%), pressured them (9%), and had high expectations for completion of work (8%). Those who felt their teachers are easy reported that they weren't pressured and that teachers had low expectations for them. Students with mixed feelings reported that teachers weren't hard but expected good grades, that they sometimes allowed the student to slack off, and that while some students "get through easy" others are expected to work hard.

Support

Mentally Retarded

Sixteen of the mentally retarded students (91%) felt that their resource room teachers cared about whether they succeeded. Students reported that their teachers help them, check on their progress, and talked with them about their lives and any problems they may have. Types of help reported by students included help with subjects such as mathematics, reading, spelling, and social studies, as well as help with tests and reports. Three students reported needing more help from the resource room teachers.

Emotional/Behavioral

Twenty-nine of the emotional/behavioral students felt that resource room teachers were supportive and wanted them to succeed, and three had mixed feelings. Students reported that teachers exhibited caring attitudes, talked with them about school-related and personal problems, and felt that their teachers wanted them to graduate. Students also felt that teachers cared because they were willing to help and work with them. Reegarding the types of help they received from teachers, thirteen students reported receiving help with their work and nine received any help they needed. Four students reported getting individual attention, and three said that teachers helped by encouraging, supporting, and coaching them. None of the students reported needing additional help from the resource room teachers.

Perceptual/Communicative (LD)

Almost all of the LD students (98%) felt that teachers in the resource rooms cared about whether they succeed. Students felt that teachers cared because they helped them, checked on their progress, and generally felt that teachers wanted them to do well and succeed. Students also reported that resource room teachers exhibited their caring by giving encouragement and reinforcement, and by getting to know students and being interested in them. Types of help students reported receiving from resource room teachers included explanations and demonstrations, and individualized help, and help with their work. Twenty students (20%) reported receiving help with "whatever" they needed, and 17 (17%) said that they received a lot of help. Eleven percent (11%) of the students felt that they could use more help from resource room teachers.

Related Services Support

A total of 11 mentally retarded students, 18 emotional/behavioral students, and 49 LD students worked with related services staff, including speech therapists, physical therapists, occupational therapists, hearing loss therapists, social workers, and psychologists. In addition, nine mentally retarded, 23 emotional/behavioral, and 75 LD students reported having worked with school counselors.

Speech Therapist

All of the mentally retarded students (100%), 85% of the LD students, and 67% of the emotional/behavioral students found the speech therapists they worked with helpful. Students most frequently reported being able to communicate better, with improvement in their writing, vocabulary, reading, and comprehension. Students also reported increased self-confidence. One individual reported that she didn't like the therapist correcting her English, and another reported not getting along with the therapist.

Physical Therapist

While all of the mentally retarded students felt the physical therapist was helpful, only 75% of the LD students and none of the emotional/behavioral students found the services helpful.

Occupational Therapist

All of the LD students who worked with the occupational therapist reported that it was helpful.

Hearing Loss Therapist

All of the mentally retarded and emotional/behavioral students reported that working with the hearing therapist was helpful; 82% of the LD students found the services helpful. Students in each group reported that their contact with the therapist was to have their hearing tested. Students also reported receiving advice from the therapist and one reported improved hearing.

Social Worker

Eighty percent of the mentally retarded students and 73% of the emotional/behavioral and LD students reported that working with the social worker was helpful. Students in each group reported that the social worker listened and helped them with problems. Others reported that the social worker helped them get a job, got them into a peer leadership group, and generally helped get them through school. Students who felt the social worker was not helpful reported that they weren't helped with problems, felt the social worker shouldn't be involved in "their business," and that they didn't like the social worker. One individual reported that the social worker documented the situation and didn't follow up.

Psychologist

Eighty-three percent of the LD students, 60% of the mentally retarded students, and 56% of the emotional/behavioral students reported that working with psychologists was helpful. Students reported that the psychologist helped them with problems and listened to them. Some students did not feel comfortable talking with the psychologist, one felt that the psychologist shouldn't be interfering in his business, and another reported that it wasn't helpful because they didn't see the psychologist often enough. One individual who was not helped by the psychologist commented that the psychologist "made the problem more complicated."

School Counselor

Eighty-nine percent of the mentally retarded and LD students and 83% of the emotional/behavioral students found that working with the school counselor was helpful. Students in each group most frequently reported that the counselor helped them with class selection and scheduling. LD and emotional/behavioral students also frequently reported that the counselor helped them with problems. Students also reported that the counselor helped resolve conflicts with teachers, encouraged them to stay in school, helped them get a job, and helped get them into resource classes. Individuals reported that the counselor discussed college and future plans with them, conducted a helpful career seminar, worked on SAT's, and acquired a special ACT test. Some students reported that the counselor was not helpful dealing with classes and schedules, information on loans and scholarships, or college placement. Students also reported that it was difficult to get appointments with the counselor and perceived a "don't care" attitude. One student stated, "There are too many students and the counselor isn't always available. They don't care about you, they care about schedules and getting the work done. They aren't counseling anyway, just scheduling."

Feelings About Working with Related Services Staff

Seven emotional/behavioral and seven LD students reported being bothered by working with related services staff. An LD student reported that working with the speech therapist bothered him because he was pulled out of class and it was hard to get caught up. Students frequently reported not feeling comfortable talking with social workers or psychologists.

Seven LD and six emotional/behavioral students also reported feeling bothered by working with the school counselor. Students frequently reported that it was difficult to get appointments with the counselor and perceived that the counselor didn't care. One student did not feel sure the counselor kept the case confidential and another reported being bothered because the counselor "messed up" their schedule. One individual was bothered by having to see the counselor when they didn't want to and another was tense until he learned that he could talk to the counselor freely.

School and Community Activities

Each of the handicap groups was asked about involvement in various school activities. None of the mentally retarded students and at least 40% of the emotional/behavioral and LD students had participated in school sports (40% and 44% respectively). Thirteen percent (13%) of the LD students, 11% of emotional/behavioral students, and 5% of the mentally retarded students participated in school music groups. About one-third of the LD students (31%), one-quarter of the mentally retarded (26%), and 17% of the emotional/behavioral students joined a school club. The majority of students in each group attended a school sporting event (LD - 83%; emotional/behavioral - 69%; mentally retarded - 53%). Half of the LD students (50%), 26% of the mentally retarded students, and 31% of the emotional/ behavioral students reported attending a school concert. More than 40% of the students in each group had attended a school play (LD - 57%; mentally retarded (47%); emotional/behavioral - 43%). The highest percentage of students not participating in any school activities were mentally retarded (26%), followed by emotional/behavioral (11%), and LD students (8%). The table below presents the number and percentage of students involved in various school activities by handicap group.

Percent of Students Who Reported Participating in Various School Activities by Handicap

	Mentally Retarded		Emotional/ Behavioral		(LD) Perceptual/ Communicative	
	#	%	#	%	#	%
Participated in school sport	0	–	14	40%	59	44%
Participated in school music group	1	5%	4	11%	17	13%
Joined school club	5	26%	6	17%	42	31%
Attended school sporting event	10	53%	24	69%	112	83%
Attended school concert	5	26%	11	31%	67	50%
Attended school play	9	47%	15	43%	77	57%
No participation in school activities	5	26%	4	11%	11	8%

Other school activities cited by students included dances and proms, homecoming, pep rallies, talent shows, Special Olympics, carnivals, the youth-to-youth conference, peer counseling groups, a hearing about teachers, class meetings, and the parents advisory council.

Students also had an opportunity to indicate school activities they would have liked to participate in, but haven't and what has kept them from participating. Sixty percent of the emotional/ behavioral students, 37% of the mentally retarded students, and 35% of the LD students cited activities. Students in each group most frequently cited sports they would like to have participated in. Students also cited school activities such as music groups, concerts, plays, and school clubs. Reasons frequently cited for not participating included work commitments and not having enough time. Other reasons included injury, lack of confidence, not making the team, no money, not knowing how to join, and grades. Students also reported on activities that were not offered at their school. Some individuals cited their particular disability as a reason for not participating.

Students described many types of hobbies and interests they have outside of school. Activities fell into four categories, as follows: outdoor activities; sports-related activities; arts/crafts, games, and music; possible vocational skills and interests, and social activities.

Outdoor Activities

The category of outdoor activities includes bicycling, boating/sailing, camping, fishing, four-wheeling, gardening/farming, hiking, horseback riding, hunting, motorcross, mountain/rock climbing, rafting, riding/racing motorcycles, rodeo, shooting, snowmobiling, and windsurfing.

Outdoor activities most frequently cited by LD students included skiing (18%), fishing (18%), and camping (13%). Other activities cited by LD students included bicycling, hunting, horseback riding, and hiking. Activities most frequently cited by emotional/behavioral students included skiing (23%), horseback riding (11%). and fishing (9%). Other activities mentioned by this group included bicycling, walking, hiking, mountain climbing, and four-wheeling. Mentally retarded students most frequently cited bicycling (26%).

Sports-Related Activities

This category includes sports such as football, basketball, baseball, soccer, hockey, and volleyball, as well as bowling, coaching, exercising, golf, lifting weights, marshall arts, skating, swimming, tennis, and Special Olympics.

Nineteen percent of the LD students cited involvement in sports such as basketball, football, and volleyball. More than 40% of the mentally retarded students reported being involved in sports such as basketball, football, baseball, and soccer. About one-quarter of the emotional/behavioral students (26%) cited involvement in organized sports such as football, basketball, golf, hockey, and volleyball among their interests. Swimming was also frequently cited by mentally retarded (21%) and LD students (8%).

Arts/Crafts, Games, and Music

Interests and hobbies included in this category include various arts and crafts such as painting, drawing, ceramics, flower arranging, jewelry-making, knitting/crocheting, photography, and sewing as well as games such as word puzzles, computer/video games, strategic games, and role-playing games. Musical interests include listening to music, playing instruments, being a disk jockey, and going to concerts. Students also reported interests in writing, baking and cooking, acting, building models, collecting, and dancing.

Activities most frequently reported by LD students include building models (7%) and drawing (7%). Emotional/behavioral students most frequently reported listening to music (23%) and dancing (11%). Collecting items such as porcelain dolls, horses, and baseball cards was most frequently reported by mentally retarded students (21%), as well as listening to music (11%) and baking or cooking (11%).

Vocational Skills and Interests

Building/carpentry, mechanics, welding, drafting, computers, electronics, robotics, and typing were possible vocational skills and interests cited by students. Mechanics was most frequently cited by LD students (21%) and emotional/behavioral students (14%).

Social Activities

Activities such as socializing with friends, family activities, club meetings, shopping, going to movies, watching television or movies, traveling, working with children/babysitting, and working were included in this category. Socializing with friends and working were most frequently cited by LD and emotional/ behavioral students. Mentally retarded students most frequently cited watching TV or movies.

Independent Living

Interviewed students were asked about their job readiness – whether they felt ready for a job, what they had learned in school to help them get a job, and what kinds of jobs or possible careers they had learned about. Students were also asked about their rights – whether they had participated in class discussions about their rights, what their rights are, and whether they feel they could stand up for their rights if needed. Finally, students were asked about their post-high school plans – job and education plans, plans for where they will live after high school. Analyses are presented for each of these areas.

Job Readiness

At least 84% of the students in each group reported feeling ready for a job. Regarding what they had learned to help them get a job, mentally retarded students most frequently reported having learned how to apply for a job, followed by interview skills, and academic skills such as math and reading. Emotional/behavioral students most frequently reported that they had learned nothing in school to help them get a job; students also reported that they had learned how to prepare a resume, academic skills in English and mathematics, how to apply for a job, and interview skills. Interview skills and how to apply for a job were most frequently reported by LD students as what they had learned to help them get a job. Twenty-three percent (23%) of the LD students and 57% of the emotional/behavioral students reported that they had not learned about jobs or careers in school. Mentally retarded and the remaining LD and emotional/behavioral students reported on a variety of jobs, including mechanics, computers, food service, teacher, child care, construction, building maintenance, nursing, drafting and journalism.

Students' Rights

More than half of the emotional/behavioral and LD students had participated in class discussions regarding rights (54% and 56% respectively), while only 16% of the mentally retarded students reported participation in such class discussions. As examples of their rights, only three of the emotional/behavioral students cited their constitutional rights, and two cited civil rights. Fifteen of the LD students cited constitutional rights, ten cited civil rights, six cited constitutional amendments, and six knew about arrest proceedings. Few of the students in any handicap group could be specific, and the majority could not cite any rights.

When asked whether they could stand up for their rights, at least 94% of the students in each group responded positively. When asked to give examples of how they would do so, students said that they would speak up for themselves and be assertive. Reflecting the responses of many students, one student stated, "I'm outspoken and will say what I feel is right." Several students cited a variety of methods of standing up for their rights, including going to court, going on strike, protesting, making speeches, and writing to representatives. However, few of the students knew about their rights in a specific sense.

Post-High School Plans

Job Plans After High School

Ninety-one percent of the emotional/behavioral students, 80% of the LD students, and 74% of the mentally retarded students reported job plans.

Mentally Retarded

Job plans reported by mentally retarded students included food service, fireman, mechanic, solar panel installation, day care, music, construction, ticket agent, and cashier. One student reported plans to join the military and three just said they would work.

Emotional/Behavioral

Job plans reported by these students included nursing, floral arranging, construction, computer science/programming, secretary, cosmetology, cook, musician, auto body repair, graphic design, stock investor, engineering, drafting, car salesman, courtroom typist, electronics, sociologist, mechanic, store manager, computer repair, aircraft maintenance, robotic technician, communications, artist, writer, translator, forest ranger, taxidermist, driving instructor, and carpenter. Five students reported plans to go into military service, and one plans on entering the Job Corps.

Perceptual/Communicative (LD)

Frequently reported job plans included military service, mechanic, cosmetology, teacher, artist, electronics, accounting, engineer, and computers. Other job plans cited by students included law enforcement, modeling, secretary, dental assistant, construction, draftsman, airline stewardess, historical costumer, psychologist, interior designer, child care, counselor, auto repair, architect, horse trainer, social worker, glass installer, professional nanny, farmer, truck driver, chef, pilot, travel agent, fireman, minister, computer technician, lawyer, forestry, communications, physical therapist, athletic trainer, aerospace design, food service, landscaping, advertising, photo journalist, and veterinarian.

Education Plans After High School

Sixty-six percent (66%) of the emotional/behavioral students, 61% of the LD students, and 37% of the mentally retarded students reported education plans.

Mentally Retarded

Education plans reported by mentally retarded students included attending a four-year college, community college, and training to be a fireman.

Emotional/Behavioral

Attending a four-year college was most frequently reported by emotional/behavioral students. A number of students reported that they would like to go to college but had no specific plans. Students also reported education plans including attending community colleges, vocational schools, art school, music institute, and school to learn sign language.

Perceptual/Communicative (LD)

The majority of students reported plans for college, including four-year colleges, community colleges, vocational schools, and business schools. Students also cited military service plans as part of their education plans. Students also reported plans to attend the following: police academy, art institute, beauty school, culinary arts school, boarding school, and nanny school.

Places to Live After High School

Sixty-six percent (66%) of the emotional/behavioral, 59% of the LD students, and 47% of the mentally retarded students cited places they would like to live after high school.

Mentally Retarded

Mentally retarded students most frequently reported that they would live with their family after high school. Students also reported plans for getting their own apartment. They also identified various states where they would like to live.

Emotional/Behavioral

Students most frequently reported various cities and towns in Colorado where they would live after high school. Some students reported plans to get their own apartments and live on their own; others reported plans to live with their family. Students also identified various states where they would like to live, including California, Florida, Montana, Nebraska, Arizona, New York, Maine, and Texas.

Perceptual/Communicative (LD)

Twenty-one percent of the LD students cited Colorado as where they would live after high school. Other areas of the country mentioned by students included California, Arizona, Nevada, Washington, Alabama, Kentucky, Texas, Utah, Oregon, Iowa, Montana, and Missouri. Two students cited England and Australia as where they would like to live. Students also frequently reported that they would live with their family after high school (11%). They also said that they would live wherever they were stationed, on college campuses, or have their own apartment.